

```

1 ssh://root@103.254.67.181:10006/usr/bin/
  python -u /home/sunfengzhen/pycharm/
  earthquake_cnn/earthquake-cnn.py
2 Using TensorFlow backend.
3 #####load dataset
  #####
4 load dataset completed !
5 X_train[0:2]
6 [12  6]
7 y_train[0:2]
8 [1.46909998 1.46909998]
9 X_train.shape (4194, 150000, 1)
10 X_train[:3, -1, 0] [0 5 3]
11 y_train.shape (4194,)
12 y_train[:3] [1.43079719 1.39149889 1.
  35319609]
13 #####model train
  #####
14 model.metrics_names = ['loss', '
  mean_absolute_error']
15
16 Layer (type)                Output
  Shape                        Param #

```

17	=====	
18	conv1d_1 (Conv1D)	(None, 149991, 32) 352
19		
20	max_pooling1d_1 (MaxPooling1D)	(None, 1499, 32) 0
21		
22	conv1d_2 (Conv1D)	(None, 1490, 64) 20544
23		
24	global_average_pooling1d_1 (GlobalAveragePooling1D)	(None, 64) 0
25		
26	dense_1 (Dense)	(None, 16) 1040
27		
28	dense_2 (Dense)	(None, 1) 17

```
29 =====
30 Total params: 21,953
31 Trainable params: 21,953
32 Non-trainable params: 0
33
34 Train on 3355 samples, validate on 839
   samples
35 Epoch 1/10000
36 2019-05-31 15:34:04.034063: I tensorflow
   /core/platform/cpu_feature_guard.cc:141
   ] Your CPU supports instructions that
   this TensorFlow binary was not compiled
   to use: AVX2 FMA
37 2019-05-31 15:34:04.265625: I tensorflow
   /core/common_runtime/gpu/gpu_device.cc:
   1432] Found device 0 with properties:
38 name: GeForce GTX 1080 Ti major: 6 minor
   : 1 memoryClockRate(GHz): 1.582
39 pci BusID: 0000:82:00:0
40 totalMemory: 10.92GiB freeMemory: 10.
   76GiB
41 2019-05-31 15:34:04.265692: I tensorflow
```

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41 /core/common_runtime/gpu/gpu_device.cc:
1511] Adding visible gpu devices: 0
42 2019-05-31 15:34:04.580241: I tensorflow
/core/common_runtime/gpu/gpu_device.cc:
982] Device interconnect StreamExecutor
with strength 1 edge matrix:
43 2019-05-31 15:34:04.580316: I tensorflow
/core/common_runtime/gpu/gpu_device.cc:
988]      0
44 2019-05-31 15:34:04.580326: I tensorflow
/core/common_runtime/gpu/gpu_device.cc:
1001] 0:    N
45 2019-05-31 15:34:04.580643: I tensorflow
/core/common_runtime/gpu/gpu_device.cc:
1115] Created TensorFlow device (/job:
localhost/replica:0/task:0/device:GPU:0
with 10409 MB memory) -> physical GPU (
device: 0, name: GeForce GTX 1080 Ti,
pci bus id: 0000:82:00.0, compute
capability: 6.1)
46 - 19s - loss: 15.1683 -
mean_absolute_error: 3.0202 - val_loss:
8.8480 - val_mean_absolute_error: 2.2890
47 Epoch 2/10000
```

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48 - 15s - loss: 8.7837 -  
mean_absolute_error: 2.3087 - val_loss:  
8.6811 - val_mean_absolute_error: 2.2367  
49 Epoch 3/10000  
50 - 15s - loss: 8.3240 -  
mean_absolute_error: 2.2346 - val_loss:  
9.7400 - val_mean_absolute_error: 2.3232  
51 Epoch 4/10000  
52 - 15s - loss: 8.1543 -  
mean_absolute_error: 2.2215 - val_loss:  
11.2215 - val_mean_absolute_error: 2.  
7713  
53 Epoch 5/10000  
54 - 15s - loss: 8.0412 -  
mean_absolute_error: 2.1969 - val_loss:  
7.7811 - val_mean_absolute_error: 2.1900  
55 Epoch 6/10000  
56 - 15s - loss: 7.8946 -  
mean_absolute_error: 2.1777 - val_loss:  
7.8402 - val_mean_absolute_error: 2.1623  
57 Epoch 7/10000  
58 - 14s - loss: 7.7775 -  
mean_absolute_error: 2.1739 - val_loss:  
8.7321 - val_mean_absolute_error: 2.4197
```

```
59 Epoch 8/10000
60   - 14s - loss: 7.7975 -
    mean_absolute_error: 2.1647 - val_loss:
    7.7523 - val_mean_absolute_error: 2.1559
61 Epoch 9/10000
62   - 14s - loss: 7.7128 -
    mean_absolute_error: 2.1592 - val_loss:
    7.6333 - val_mean_absolute_error: 2.1390
63 Epoch 10/10000
64   - 15s - loss: 7.6721 -
    mean_absolute_error: 2.1487 - val_loss:
    7.7449 - val_mean_absolute_error: 2.1356
65 Epoch 11/10000
66   - 14s - loss: 7.6976 -
    mean_absolute_error: 2.1594 - val_loss:
    9.0514 - val_mean_absolute_error: 2.2290
67 Epoch 12/10000
68   - 14s - loss: 7.6138 -
    mean_absolute_error: 2.1615 - val_loss:
    7.5295 - val_mean_absolute_error: 2.1295
69 Epoch 13/10000
70   - 14s - loss: 7.6236 -
    mean_absolute_error: 2.1558 - val_loss:
    7.6261 - val_mean_absolute_error: 2.1359
```

```
71 Epoch 14/10000
72   - 15s - loss: 7.6295 -
    mean_absolute_error: 2.1426 - val_loss:
    7.5261 - val_mean_absolute_error: 2.1632
73 Epoch 15/10000
74   - 15s - loss: 7.6015 -
    mean_absolute_error: 2.1480 - val_loss:
    7.5029 - val_mean_absolute_error: 2.1376
75 Epoch 16/10000
76   - 14s - loss: 7.6519 -
    mean_absolute_error: 2.1618 - val_loss:
    8.4447 - val_mean_absolute_error: 2.3816
77 Epoch 17/10000
78   - 14s - loss: 7.5800 -
    mean_absolute_error: 2.1520 - val_loss:
    7.4679 - val_mean_absolute_error: 2.1631
79 Epoch 18/10000
80   - 14s - loss: 7.5966 -
    mean_absolute_error: 2.1521 - val_loss:
    7.5730 - val_mean_absolute_error: 2.2174
81 Epoch 19/10000
82   - 14s - loss: 7.5882 -
    mean_absolute_error: 2.1508 - val_loss:
    7.6418 - val_mean_absolute_error: 2.2072
```

```
83 Epoch 20/10000
84   - 14s - loss: 7.5978 -
      mean_absolute_error: 2.1513 - val_loss
      : 7.5902 - val_mean_absolute_error: 2.
      2217
85 Epoch 21/10000
86   - 14s - loss: 7.5759 -
      mean_absolute_error: 2.1489 - val_loss
      : 7.4744 - val_mean_absolute_error: 2.
      1832
87 Epoch 22/10000
88   - 14s - loss: 7.5179 -
      mean_absolute_error: 2.1320 - val_loss
      : 7.4728 - val_mean_absolute_error: 2.
      1849
89 Epoch 23/10000
90   - 14s - loss: 7.5469 -
      mean_absolute_error: 2.1389 - val_loss
      : 7.4188 - val_mean_absolute_error: 2.
      1627
91 Epoch 24/10000
92   - 14s - loss: 7.5022 -
      mean_absolute_error: 2.1485 - val_loss
      : 7.4329 - val_mean_absolute_error: 2.
```



```
92 1322
93 Epoch 25/10000
94 - 14s - loss: 7.5359 -
mean_absolute_error: 2.1348 - val_loss
: 8.6670 - val_mean_absolute_error: 2.
1978
95 Epoch 26/10000
96 - 14s - loss: 7.5667 -
mean_absolute_error: 2.1464 - val_loss
: 7.4518 - val_mean_absolute_error: 2.
1834
97 Epoch 27/10000
98 - 14s - loss: 7.5034 -
mean_absolute_error: 2.1478 - val_loss
: 7.3835 - val_mean_absolute_error: 2.
1449
99 Epoch 28/10000
100 - 14s - loss: 7.4782 -
mean_absolute_error: 2.1373 - val_loss
: 7.4360 - val_mean_absolute_error: 2.
1624
101 Epoch 29/10000
102 - 14s - loss: 7.4842 -
mean_absolute_error: 2.1321 - val_loss
```

```
102 : 7.5097 - val_mean_absolute_error: 2.  
1952  
103 Epoch 30/10000  
104 - 14s - loss: 7.4794 -  
mean_absolute_error: 2.1314 - val_loss  
: 7.4295 - val_mean_absolute_error: 2.  
1832  
105 Epoch 31/10000  
106 - 14s - loss: 7.4490 -  
mean_absolute_error: 2.1323 - val_loss  
: 7.4103 - val_mean_absolute_error: 2.  
1802  
107 Epoch 32/10000  
108 - 14s - loss: 7.4588 -  
mean_absolute_error: 2.1281 - val_loss  
: 7.3698 - val_mean_absolute_error: 2.  
1350  
109 Epoch 33/10000  
110 - 14s - loss: 7.4400 -  
mean_absolute_error: 2.1275 - val_loss  
: 7.4308 - val_mean_absolute_error: 2.  
1214  
111 Epoch 34/10000  
112 - 14s - loss: 7.4085 -
```

```
112 mean_absolute_error: 2.1193 - val_loss
    : 7.3727 - val_mean_absolute_error: 2.
1704
113 Epoch 35/10000
114   - 14s - loss: 7.3916 -
    mean_absolute_error: 2.1219 - val_loss
    : 7.2870 - val_mean_absolute_error: 2.
1328
115 Epoch 36/10000
116   - 14s - loss: 7.4007 -
    mean_absolute_error: 2.1288 - val_loss
    : 8.0428 - val_mean_absolute_error: 2.
1367
117 Epoch 37/10000
118   - 14s - loss: 7.3951 -
    mean_absolute_error: 2.1217 - val_loss
    : 7.9673 - val_mean_absolute_error: 2.
1283
119 Epoch 38/10000
120   - 14s - loss: 7.4048 -
    mean_absolute_error: 2.1261 - val_loss
    : 7.4697 - val_mean_absolute_error: 2.
1105
121 Epoch 39/10000
```

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122 - 14s - loss: 7.3085 -  
mean_absolute_error: 2.1097 - val_loss  
: 8.8300 - val_mean_absolute_error: 2.  
4375  
123 Epoch 40/10000  
124 - 14s - loss: 7.3940 -  
mean_absolute_error: 2.1140 - val_loss  
: 7.2316 - val_mean_absolute_error: 2.  
1240  
125 Epoch 41/10000  
126 - 14s - loss: 7.3421 -  
mean_absolute_error: 2.1193 - val_loss  
: 7.2040 - val_mean_absolute_error: 2.  
1159  
127 Epoch 42/10000  
128 - 14s - loss: 7.3374 -  
mean_absolute_error: 2.1168 - val_loss  
: 8.1360 - val_mean_absolute_error: 2.  
3171  
129 Epoch 43/10000  
130 - 14s - loss: 7.2578 -  
mean_absolute_error: 2.0990 - val_loss  
: 7.5500 - val_mean_absolute_error: 2.  
2257
```

```
131 Epoch 44/10000
132   - 14s - loss: 7.3153 -
      mean_absolute_error: 2.1108 - val_loss
      : 8.2970 - val_mean_absolute_error: 2.
      3614
133 Epoch 45/10000
134   - 13s - loss: 7.2933 -
      mean_absolute_error: 2.1116 - val_loss
      : 7.3204 - val_mean_absolute_error: 2.
      1056
135 Epoch 46/10000
136   - 14s - loss: 7.2467 -
      mean_absolute_error: 2.1107 - val_loss
      : 7.7252 - val_mean_absolute_error: 2.
      1110
137 Epoch 47/10000
138   - 14s - loss: 7.2598 -
      mean_absolute_error: 2.1007 - val_loss
      : 7.4162 - val_mean_absolute_error: 2.
      0962
139 Epoch 48/10000
140   - 14s - loss: 7.2220 -
      mean_absolute_error: 2.0965 - val_loss
      : 7.4410 - val_mean_absolute_error: 2.
```

```
140 1999
141 Epoch 49/10000
142   - 13s - loss: 7.3237 -
      mean_absolute_error: 2.1132 - val_loss
      : 7.6207 - val_mean_absolute_error: 2.
0994
143 Epoch 50/10000
144   - 14s - loss: 7.2616 -
      mean_absolute_error: 2.1067 - val_loss
      : 7.7169 - val_mean_absolute_error: 2.
2376
145 Epoch 51/10000
146   - 14s - loss: 7.2755 -
      mean_absolute_error: 2.1060 - val_loss
      : 7.7864 - val_mean_absolute_error: 2.
1107
147 Epoch 52/10000
148   - 14s - loss: 7.2382 -
      mean_absolute_error: 2.0997 - val_loss
      : 7.1417 - val_mean_absolute_error: 2.
1141
149 Epoch 53/10000
150   - 14s - loss: 7.2282 -
      mean_absolute_error: 2.1000 - val_loss
```

```
150 : 7.4872 - val_mean_absolute_error: 2.
    2142
151 Epoch 54/10000
152 - 14s - loss: 7.2497 -
    mean_absolute_error: 2.0984 - val_loss
    : 7.3100 - val_mean_absolute_error: 2.
    1774
153 Epoch 55/10000
154 - 14s - loss: 7.2968 -
    mean_absolute_error: 2.1138 - val_loss
    : 7.9449 - val_mean_absolute_error: 2.
    2933
155 Epoch 56/10000
156 - 14s - loss: 7.2419 -
    mean_absolute_error: 2.1029 - val_loss
    : 7.4685 - val_mean_absolute_error: 2.
    2173
157 Epoch 57/10000
158 - 14s - loss: 7.1579 -
    mean_absolute_error: 2.0915 - val_loss
    : 7.2014 - val_mean_absolute_error: 2.
    1493
159 Epoch 58/10000
160 - 14s - loss: 7.2190 -
```

```
160 mean_absolute_error: 2.1017 - val_loss
    : 7.1602 - val_mean_absolute_error: 2.
1276
161 Epoch 59/10000
162   - 14s - loss: 7.1965 -
    mean_absolute_error: 2.0937 - val_loss
    : 7.2979 - val_mean_absolute_error: 2.
0929
163 Epoch 60/10000
164   - 14s - loss: 7.1662 -
    mean_absolute_error: 2.0947 - val_loss
    : 7.1384 - val_mean_absolute_error: 2.
1230
165 Epoch 61/10000
166   - 14s - loss: 7.1796 -
    mean_absolute_error: 2.0890 - val_loss
    : 7.5200 - val_mean_absolute_error: 2.
0978
167 Epoch 62/10000
168   - 14s - loss: 7.2296 -
    mean_absolute_error: 2.1012 - val_loss
    : 7.3611 - val_mean_absolute_error: 2.
1692
169 Epoch 63/10000
```



```
170 - 13s - loss: 7.1665 -  
mean_absolute_error: 2.0814 - val_loss  
: 7.0819 - val_mean_absolute_error: 2.  
0976  
171 Epoch 64/10000  
172 - 14s - loss: 7.1989 -  
mean_absolute_error: 2.0931 - val_loss  
: 7.1163 - val_mean_absolute_error: 2.  
1172  
173 Epoch 65/10000  
174 - 14s - loss: 7.1702 -  
mean_absolute_error: 2.0947 - val_loss  
: 7.1374 - val_mean_absolute_error: 2.  
1209  
175 Epoch 66/10000  
176 - 14s - loss: 7.2324 -  
mean_absolute_error: 2.1006 - val_loss  
: 7.1881 - val_mean_absolute_error: 2.  
0970  
177 Epoch 67/10000  
178 - 13s - loss: 7.1627 -  
mean_absolute_error: 2.0913 - val_loss  
: 7.3047 - val_mean_absolute_error: 2.  
1122
```

```
179 Epoch 68/10000
180   - 14s - loss: 7.1636 -
      mean_absolute_error: 2.0939 - val_loss
      : 7.3090 - val_mean_absolute_error: 2.
      1693
181 Epoch 69/10000
182   - 14s - loss: 7.1700 -
      mean_absolute_error: 2.0995 - val_loss
      : 7.1732 - val_mean_absolute_error: 2.
      1415
183 Epoch 70/10000
184   - 14s - loss: 7.1372 -
      mean_absolute_error: 2.0791 - val_loss
      : 7.1702 - val_mean_absolute_error: 2.
      1343
185 Epoch 71/10000
186   - 13s - loss: 7.1772 -
      mean_absolute_error: 2.0992 - val_loss
      : 7.4419 - val_mean_absolute_error: 2.
      1985
187 Epoch 72/10000
188   - 14s - loss: 7.1900 -
      mean_absolute_error: 2.0988 - val_loss
      : 7.3760 - val_mean_absolute_error: 2.
```

```
188 1024
189 Epoch 73/10000
190 - 13s - loss: 7.1247 -
    mean_absolute_error: 2.0869 - val_loss
    : 8.3570 - val_mean_absolute_error: 2.
    3506
191 Epoch 74/10000
192 - 14s - loss: 7.1555 -
    mean_absolute_error: 2.0831 - val_loss
    : 7.1332 - val_mean_absolute_error: 2.
    0888
193 Epoch 75/10000
194 - 14s - loss: 7.1055 -
    mean_absolute_error: 2.0826 - val_loss
    : 7.1176 - val_mean_absolute_error: 2.
    1035
195 Epoch 76/10000
196 - 14s - loss: 7.1387 -
    mean_absolute_error: 2.0847 - val_loss
    : 7.7780 - val_mean_absolute_error: 2.
    1230
197 Epoch 77/10000
198 - 14s - loss: 7.1780 -
    mean_absolute_error: 2.0879 - val_loss
```

```
198 : 7.1156 - val_mean_absolute_error: 2.
1248
199 Epoch 78/10000
200 - 14s - loss: 7.0753 -
mean_absolute_error: 2.0859 - val_loss
: 8.0812 - val_mean_absolute_error: 2.
3306
201 Epoch 79/10000
202 - 14s - loss: 7.1397 -
mean_absolute_error: 2.0885 - val_loss
: 7.1056 - val_mean_absolute_error: 2.
1172
203 Epoch 80/10000
204 - 13s - loss: 7.1185 -
mean_absolute_error: 2.0841 - val_loss
: 7.5819 - val_mean_absolute_error: 2.
2309
205 Epoch 81/10000
206 - 14s - loss: 7.0693 -
mean_absolute_error: 2.0764 - val_loss
: 8.6249 - val_mean_absolute_error: 2.
1887
207 Epoch 82/10000
208 - 14s - loss: 7.1195 -
```

```
208 mean_absolute_error: 2.0922 - val_loss
    : 7.7293 - val_mean_absolute_error: 2.
2844
209 Epoch 83/10000
210   - 14s - loss: 7.1097 -
    mean_absolute_error: 2.0856 - val_loss
    : 7.4057 - val_mean_absolute_error: 2.
0894
211 Epoch 84/10000
212   - 14s - loss: 7.1911 -
    mean_absolute_error: 2.0934 - val_loss
    : 7.7259 - val_mean_absolute_error: 2.
2734
213 Epoch 85/10000
214   - 14s - loss: 7.1246 -
    mean_absolute_error: 2.0906 - val_loss
    : 7.1773 - val_mean_absolute_error: 2.
0874
215 Epoch 86/10000
216   - 14s - loss: 7.0968 -
    mean_absolute_error: 2.0904 - val_loss
    : 7.5386 - val_mean_absolute_error: 2.
2303
217 Epoch 87/10000
```

```
218 - 14s - loss: 7.1621 -  
mean_absolute_error: 2.0912 - val_loss  
: 7.5915 - val_mean_absolute_error: 2.  
2405  
219 Epoch 88/10000  
220 - 13s - loss: 7.1497 -  
mean_absolute_error: 2.0887 - val_loss  
: 8.3165 - val_mean_absolute_error: 2.  
3817  
221 Epoch 89/10000  
222 - 13s - loss: 7.0768 -  
mean_absolute_error: 2.0857 - val_loss  
: 8.5135 - val_mean_absolute_error: 2.  
3870  
223 Epoch 90/10000  
224 - 13s - loss: 7.0650 -  
mean_absolute_error: 2.0874 - val_loss  
: 7.7930 - val_mean_absolute_error: 2.  
1113  
225 Epoch 91/10000  
226 - 14s - loss: 7.1039 -  
mean_absolute_error: 2.0836 - val_loss  
: 7.3186 - val_mean_absolute_error: 2.  
1149
```

```
227 Epoch 92/10000
228   - 13s - loss: 7.1555 -
      mean_absolute_error: 2.0929 - val_loss
      : 7.1357 - val_mean_absolute_error: 2.
      1337
229 Epoch 93/10000
230   - 13s - loss: 7.0716 -
      mean_absolute_error: 2.0802 - val_loss
      : 8.6561 - val_mean_absolute_error: 2.
      4034
231 Epoch 94/10000
232   - 14s - loss: 7.0898 -
      mean_absolute_error: 2.0768 - val_loss
      : 7.2493 - val_mean_absolute_error: 2.
      1547
233 Epoch 95/10000
234   - 13s - loss: 7.1174 -
      mean_absolute_error: 2.0841 - val_loss
      : 8.1147 - val_mean_absolute_error: 2.
      3471
235 Epoch 96/10000
236   - 13s - loss: 7.0581 -
      mean_absolute_error: 2.0817 - val_loss
      : 7.2228 - val_mean_absolute_error: 2.
```

```
236 1030
237 Epoch 97/10000
238   - 14s - loss: 7.0596 -
      mean_absolute_error: 2.0760 - val_loss
      : 7.9111 - val_mean_absolute_error: 2.
2780
239 Epoch 98/10000
240   - 13s - loss: 7.0615 -
      mean_absolute_error: 2.0813 - val_loss
      : 7.0888 - val_mean_absolute_error: 2.
0863
241 Epoch 99/10000
242   - 13s - loss: 7.0070 -
      mean_absolute_error: 2.0750 - val_loss
      : 7.3716 - val_mean_absolute_error: 2.
0970
243 Epoch 100/10000
244   - 13s - loss: 7.0608 -
      mean_absolute_error: 2.0820 - val_loss
      : 7.2860 - val_mean_absolute_error: 2.
1124
245 Epoch 101/10000
246   - 13s - loss: 7.0821 -
      mean_absolute_error: 2.0885 - val_loss
```



```
246 : 7.7509 - val_mean_absolute_error: 2.
2648
247 Epoch 102/10000
248 - 14s - loss: 7.0769 -
mean_absolute_error: 2.0849 - val_loss
: 7.3093 - val_mean_absolute_error: 2.
0885
249 Epoch 103/10000
250 - 13s - loss: 7.1044 -
mean_absolute_error: 2.0936 - val_loss
: 7.0875 - val_mean_absolute_error: 2.
1148
251 Epoch 104/10000
252 - 14s - loss: 7.0659 -
mean_absolute_error: 2.0747 - val_loss
: 7.3059 - val_mean_absolute_error: 2.
1826
253 Epoch 105/10000
254 - 13s - loss: 7.0255 -
mean_absolute_error: 2.0745 - val_loss
: 7.1466 - val_mean_absolute_error: 2.
1164
255 Epoch 106/10000
256 - 13s - loss: 7.0355 -
```

```
256 mean_absolute_error: 2.0735 - val_loss
    : 7.1122 - val_mean_absolute_error: 2.
    1210
257 Epoch 107/10000
258   - 13s - loss: 7.0664 -
    mean_absolute_error: 2.0825 - val_loss
    : 7.3244 - val_mean_absolute_error: 2.
    0874
259 Epoch 108/10000
260   - 13s - loss: 7.0610 -
    mean_absolute_error: 2.0832 - val_loss
    : 7.1387 - val_mean_absolute_error: 2.
    1328
261 Epoch 109/10000
262   - 13s - loss: 7.0371 -
    mean_absolute_error: 2.0777 - val_loss
    : 7.1586 - val_mean_absolute_error: 2.
    0970
263 Epoch 110/10000
264   - 14s - loss: 7.0563 -
    mean_absolute_error: 2.0851 - val_loss
    : 7.6601 - val_mean_absolute_error: 2.
    2274
265 Epoch 111/10000
```

```
266 - 13s - loss: 7.0549 -  
mean_absolute_error: 2.0756 - val_loss  
: 7.5352 - val_mean_absolute_error: 2.  
2015  
267 Epoch 112/10000  
268 - 14s - loss: 7.0397 -  
mean_absolute_error: 2.0904 - val_loss  
: 7.1309 - val_mean_absolute_error: 2.  
0829  
269 Epoch 113/10000  
270 - 13s - loss: 7.0031 -  
mean_absolute_error: 2.0714 - val_loss  
: 7.0689 - val_mean_absolute_error: 2.  
0855  
271 Epoch 114/10000  
272 - 13s - loss: 7.0218 -  
mean_absolute_error: 2.0720 - val_loss  
: 7.3966 - val_mean_absolute_error: 2.  
1981  
273 Epoch 115/10000  
274 - 14s - loss: 7.0078 -  
mean_absolute_error: 2.0724 - val_loss  
: 7.5118 - val_mean_absolute_error: 2.  
2144
```

```
275 Epoch 116/10000
276   - 13s - loss: 7.0469 -
      mean_absolute_error: 2.0775 - val_loss
      : 8.4265 - val_mean_absolute_error: 2.
      3926
277 Epoch 117/10000
278   - 14s - loss: 7.0118 -
      mean_absolute_error: 2.0741 - val_loss
      : 7.2414 - val_mean_absolute_error: 2.
      0852
279 Epoch 118/10000
280   - 13s - loss: 6.9635 -
      mean_absolute_error: 2.0623 - val_loss
      : 7.0535 - val_mean_absolute_error: 2.
      0975
281 Epoch 119/10000
282   - 13s - loss: 7.0044 -
      mean_absolute_error: 2.0707 - val_loss
      : 7.0978 - val_mean_absolute_error: 2.
      0921
283 Epoch 120/10000
284   - 13s - loss: 6.9594 -
      mean_absolute_error: 2.0685 - val_loss
      : 7.0658 - val_mean_absolute_error: 2.
```

```
284 1119
285 Epoch 121/10000
286   - 13s - loss: 7.0404 -
      mean_absolute_error: 2.0742 - val_loss
      : 7.1666 - val_mean_absolute_error: 2.
1440
287 Epoch 122/10000
288   - 14s - loss: 6.9894 -
      mean_absolute_error: 2.0726 - val_loss
      : 7.0446 - val_mean_absolute_error: 2.
1044
289 Epoch 123/10000
290   - 13s - loss: 6.9999 -
      mean_absolute_error: 2.0721 - val_loss
      : 7.8573 - val_mean_absolute_error: 2.
1205
291 Epoch 124/10000
292   - 13s - loss: 7.0011 -
      mean_absolute_error: 2.0715 - val_loss
      : 7.1566 - val_mean_absolute_error: 2.
1373
293 Epoch 125/10000
294   - 14s - loss: 7.0118 -
      mean_absolute_error: 2.0740 - val_loss
```

```
294 : 7.2975 - val_mean_absolute_error: 2.
    2029
295 Epoch 126/10000
296 - 13s - loss: 6.9781 -
    mean_absolute_error: 2.0602 - val_loss
    : 7.4723 - val_mean_absolute_error: 2.
    1133
297 Epoch 127/10000
298 - 14s - loss: 6.9661 -
    mean_absolute_error: 2.0613 - val_loss
    : 7.3095 - val_mean_absolute_error: 2.
    1982
299 Epoch 128/10000
300 - 14s - loss: 6.9743 -
    mean_absolute_error: 2.0670 - val_loss
    : 7.2103 - val_mean_absolute_error: 2.
    1678
301 Epoch 129/10000
302 - 13s - loss: 6.9516 -
    mean_absolute_error: 2.0702 - val_loss
    : 7.0268 - val_mean_absolute_error: 2.
    1120
303 Epoch 130/10000
304 - 13s - loss: 6.9805 -
```

```
304 mean_absolute_error: 2.0634 - val_loss
    : 7.1605 - val_mean_absolute_error: 2.
1085
305 Epoch 131/10000
306   - 14s - loss: 6.9657 -
    mean_absolute_error: 2.0643 - val_loss
    : 7.5683 - val_mean_absolute_error: 2.
1131
307 Epoch 132/10000
308   - 13s - loss: 6.9127 -
    mean_absolute_error: 2.0649 - val_loss
    : 7.1863 - val_mean_absolute_error: 2.
0881
309 Epoch 133/10000
310   - 13s - loss: 6.9436 -
    mean_absolute_error: 2.0613 - val_loss
    : 7.2173 - val_mean_absolute_error: 2.
1694
311 Epoch 134/10000
312   - 14s - loss: 6.9471 -
    mean_absolute_error: 2.0581 - val_loss
    : 7.0859 - val_mean_absolute_error: 2.
1119
313 Epoch 135/10000
```

```
314 - 13s - loss: 6.9595 -  
mean_absolute_error: 2.0625 - val_loss  
: 7.3263 - val_mean_absolute_error: 2.  
2057  
315 Epoch 136/10000  
316 - 13s - loss: 6.9630 -  
mean_absolute_error: 2.0624 - val_loss  
: 7.4237 - val_mean_absolute_error: 2.  
0930  
317 Epoch 137/10000  
318 - 14s - loss: 6.9192 -  
mean_absolute_error: 2.0617 - val_loss  
: 7.1275 - val_mean_absolute_error: 2.  
1548  
319 Epoch 138/10000  
320 - 14s - loss: 6.9323 -  
mean_absolute_error: 2.0601 - val_loss  
: 7.3609 - val_mean_absolute_error: 2.  
0957  
321 Epoch 139/10000  
322 - 14s - loss: 6.9357 -  
mean_absolute_error: 2.0630 - val_loss  
: 7.0421 - val_mean_absolute_error: 2.  
0898
```



```
323 Epoch 140/10000
324   - 13s - loss: 6.9419 -
      mean_absolute_error: 2.0626 - val_loss
      : 7.0977 - val_mean_absolute_error: 2.
      0898
325 Epoch 141/10000
326   - 14s - loss: 6.8672 -
      mean_absolute_error: 2.0450 - val_loss
      : 7.7672 - val_mean_absolute_error: 2.
      1081
327 Epoch 142/10000
328   - 14s - loss: 6.9262 -
      mean_absolute_error: 2.0546 - val_loss
      : 7.3954 - val_mean_absolute_error: 2.
      2162
329 Epoch 143/10000
330   - 14s - loss: 6.8445 -
      mean_absolute_error: 2.0495 - val_loss
      : 8.0817 - val_mean_absolute_error: 2.
      3699
331 Epoch 144/10000
332   - 13s - loss: 6.9803 -
      mean_absolute_error: 2.0676 - val_loss
      : 7.1267 - val_mean_absolute_error: 2.
```

```
332 1583
333 Epoch 145/10000
334 - 14s - loss: 6.9087 -
    mean_absolute_error: 2.0619 - val_loss
    : 7.0418 - val_mean_absolute_error: 2.
    1082
335 Epoch 146/10000
336 - 13s - loss: 6.8875 -
    mean_absolute_error: 2.0556 - val_loss
    : 7.3589 - val_mean_absolute_error: 2.
    1020
337 Epoch 147/10000
338 - 13s - loss: 6.9132 -
    mean_absolute_error: 2.0521 - val_loss
    : 7.1668 - val_mean_absolute_error: 2.
    1730
339 Epoch 148/10000
340 - 13s - loss: 6.9037 -
    mean_absolute_error: 2.0573 - val_loss
    : 7.4534 - val_mean_absolute_error: 2.
    2509
341 Epoch 149/10000
342 - 14s - loss: 6.8479 -
    mean_absolute_error: 2.0453 - val_loss
```

```
342 : 7.0587 - val_mean_absolute_error: 2.  
1041  
343 Epoch 150/10000  
344 - 13s - loss: 6.9614 -  
mean_absolute_error: 2.0690 - val_loss  
: 7.1654 - val_mean_absolute_error: 2.  
0951  
345 Epoch 151/10000  
346 - 13s - loss: 6.9112 -  
mean_absolute_error: 2.0552 - val_loss  
: 7.3109 - val_mean_absolute_error: 2.  
1896  
347 Epoch 152/10000  
348 - 13s - loss: 6.8671 -  
mean_absolute_error: 2.0524 - val_loss  
: 7.3196 - val_mean_absolute_error: 2.  
2059  
349 Epoch 153/10000  
350 - 13s - loss: 6.9039 -  
mean_absolute_error: 2.0491 - val_loss  
: 7.1597 - val_mean_absolute_error: 2.  
1245  
351 Epoch 154/10000  
352 - 14s - loss: 6.8930 -
```

```
352 mean_absolute_error: 2.0556 - val_loss
    : 7.3327 - val_mean_absolute_error: 2.
2160
353 Epoch 155/10000
354   - 14s - loss: 6.8718 -
    mean_absolute_error: 2.0550 - val_loss
    : 7.2520 - val_mean_absolute_error: 2.
1515
355 Epoch 156/10000
356   - 13s - loss: 6.8310 -
    mean_absolute_error: 2.0507 - val_loss
    : 7.0326 - val_mean_absolute_error: 2.
1162
357 Epoch 157/10000
358   - 13s - loss: 6.8806 -
    mean_absolute_error: 2.0509 - val_loss
    : 7.1757 - val_mean_absolute_error: 2.
1545
359 Epoch 158/10000
360   - 13s - loss: 6.8280 -
    mean_absolute_error: 2.0415 - val_loss
    : 7.1984 - val_mean_absolute_error: 2.
1773
361 Epoch 159/10000
```

```
362 - 14s - loss: 6.8819 -  
mean_absolute_error: 2.0558 - val_loss  
: 7.0220 - val_mean_absolute_error: 2.  
1032  
363 Epoch 160/10000  
364 - 13s - loss: 6.9126 -  
mean_absolute_error: 2.0588 - val_loss  
: 7.2762 - val_mean_absolute_error: 2.  
1928  
365 Epoch 161/10000  
366 - 14s - loss: 6.8736 -  
mean_absolute_error: 2.0580 - val_loss  
: 7.2644 - val_mean_absolute_error: 2.  
1706  
367 Epoch 162/10000  
368 - 13s - loss: 6.8839 -  
mean_absolute_error: 2.0521 - val_loss  
: 7.1401 - val_mean_absolute_error: 2.  
1341  
369 Epoch 163/10000  
370 - 13s - loss: 6.8992 -  
mean_absolute_error: 2.0582 - val_loss  
: 7.0125 - val_mean_absolute_error: 2.  
1182
```

```
371 Epoch 164/10000
372   - 13s - loss: 6.8335 -
      mean_absolute_error: 2.0431 - val_loss
      : 7.2864 - val_mean_absolute_error: 2.
      1858
373 Epoch 165/10000
374   - 13s - loss: 6.8577 -
      mean_absolute_error: 2.0594 - val_loss
      : 7.1255 - val_mean_absolute_error: 2.
      1244
375 Epoch 166/10000
376   - 14s - loss: 6.8821 -
      mean_absolute_error: 2.0602 - val_loss
      : 7.0327 - val_mean_absolute_error: 2.
      1136
377 Epoch 167/10000
378   - 14s - loss: 6.8248 -
      mean_absolute_error: 2.0468 - val_loss
      : 7.1047 - val_mean_absolute_error: 2.
      0984
379 Epoch 168/10000
380   - 13s - loss: 6.8402 -
      mean_absolute_error: 2.0486 - val_loss
      : 7.3868 - val_mean_absolute_error: 2.
```

```
380 2202
381 Epoch 169/10000
382   - 13s - loss: 6.8436 -
      mean_absolute_error: 2.0496 - val_loss
      : 7.4530 - val_mean_absolute_error: 2.
      2468
383 Epoch 170/10000
384   - 13s - loss: 6.8414 -
      mean_absolute_error: 2.0582 - val_loss
      : 7.1487 - val_mean_absolute_error: 2.
      1379
385 Epoch 171/10000
386   - 14s - loss: 6.7982 -
      mean_absolute_error: 2.0372 - val_loss
      : 7.0638 - val_mean_absolute_error: 2.
      0947
387 Epoch 172/10000
388   - 13s - loss: 6.7743 -
      mean_absolute_error: 2.0407 - val_loss
      : 7.5617 - val_mean_absolute_error: 2.
      1392
389 Epoch 173/10000
390   - 14s - loss: 6.8207 -
      mean_absolute_error: 2.0488 - val_loss
```

```
390 : 8.7322 - val_mean_absolute_error: 2.
4412
391 Epoch 174/10000
392 - 14s - loss: 6.8085 -
mean_absolute_error: 2.0464 - val_loss
: 7.4931 - val_mean_absolute_error: 2.
0915
393 Epoch 175/10000
394 - 13s - loss: 6.7572 -
mean_absolute_error: 2.0302 - val_loss
: 7.3324 - val_mean_absolute_error: 2.
2087
395 Epoch 176/10000
396 - 13s - loss: 6.8223 -
mean_absolute_error: 2.0478 - val_loss
: 7.4431 - val_mean_absolute_error: 2.
1804
397 Epoch 177/10000
398 - 13s - loss: 6.7783 -
mean_absolute_error: 2.0478 - val_loss
: 9.0886 - val_mean_absolute_error: 2.
5173
399 Epoch 178/10000
400 - 14s - loss: 6.8167 -
```



```
400 mean_absolute_error: 2.0487 - val_loss
    : 7.3316 - val_mean_absolute_error: 2.
    2189
401 Epoch 179/10000
402   - 13s - loss: 6.7727 -
    mean_absolute_error: 2.0403 - val_loss
    : 7.1343 - val_mean_absolute_error: 2.
    1526
403 Epoch 180/10000
404   - 13s - loss: 6.7746 -
    mean_absolute_error: 2.0345 - val_loss
    : 7.9480 - val_mean_absolute_error: 2.
    3143
405 Epoch 181/10000
406   - 13s - loss: 6.7257 -
    mean_absolute_error: 2.0343 - val_loss
    : 6.9814 - val_mean_absolute_error: 2.
    0836
407 Epoch 182/10000
408   - 13s - loss: 6.7360 -
    mean_absolute_error: 2.0316 - val_loss
    : 7.0632 - val_mean_absolute_error: 2.
    1309
409 Epoch 183/10000
```

```
410 - 13s - loss: 6.7681 -  
mean_absolute_error: 2.0402 - val_loss  
: 7.0801 - val_mean_absolute_error: 2.  
1341  
411 Epoch 184/10000  
412 - 13s - loss: 6.7749 -  
mean_absolute_error: 2.0403 - val_loss  
: 7.1430 - val_mean_absolute_error: 2.  
1642  
413 Epoch 185/10000  
414 - 14s - loss: 6.7705 -  
mean_absolute_error: 2.0352 - val_loss  
: 7.1105 - val_mean_absolute_error: 2.  
1713  
415 Epoch 186/10000  
416 - 13s - loss: 6.7233 -  
mean_absolute_error: 2.0386 - val_loss  
: 7.0075 - val_mean_absolute_error: 2.  
1239  
417 Epoch 187/10000  
418 - 14s - loss: 6.7919 -  
mean_absolute_error: 2.0421 - val_loss  
: 7.0611 - val_mean_absolute_error: 2.  
1283
```

```
419 Epoch 188/10000
420   - 14s - loss: 6.6924 -
      mean_absolute_error: 2.0250 - val_loss
      : 7.0650 - val_mean_absolute_error: 2.
      1344
421 Epoch 189/10000
422   - 14s - loss: 6.7135 -
      mean_absolute_error: 2.0274 - val_loss
      : 7.0533 - val_mean_absolute_error: 2.
      1017
423 Epoch 190/10000
424   - 14s - loss: 6.7525 -
      mean_absolute_error: 2.0345 - val_loss
      : 7.0956 - val_mean_absolute_error: 2.
      1524
425 Epoch 191/10000
426   - 14s - loss: 6.7318 -
      mean_absolute_error: 2.0370 - val_loss
      : 7.0895 - val_mean_absolute_error: 2.
      1190
427 Epoch 192/10000
428   - 13s - loss: 6.7049 -
      mean_absolute_error: 2.0279 - val_loss
      : 7.0601 - val_mean_absolute_error: 2.
```

```
428 1208
429 Epoch 193/10000
430 - 14s - loss: 6.6915 -
mean_absolute_error: 2.0356 - val_loss
: 7.0935 - val_mean_absolute_error: 2.
1162
431 Epoch 194/10000
432 - 14s - loss: 6.7248 -
mean_absolute_error: 2.0294 - val_loss
: 7.0879 - val_mean_absolute_error: 2.
0802
433 Epoch 195/10000
434 - 14s - loss: 6.6246 -
mean_absolute_error: 2.0149 - val_loss
: 6.9970 - val_mean_absolute_error: 2.
1031
435 Epoch 196/10000
436 - 13s - loss: 6.7085 -
mean_absolute_error: 2.0319 - val_loss
: 7.2754 - val_mean_absolute_error: 2.
1018
437 Epoch 197/10000
438 - 14s - loss: 6.6590 -
mean_absolute_error: 2.0245 - val_loss
```

```
438 : 7.2200 - val_mean_absolute_error: 2.  
1202  
439 Epoch 198/10000  
440 - 13s - loss: 6.6878 -  
mean_absolute_error: 2.0221 - val_loss  
: 7.1347 - val_mean_absolute_error: 2.  
1683  
441 Epoch 199/10000  
442 - 13s - loss: 6.6606 -  
mean_absolute_error: 2.0238 - val_loss  
: 7.5665 - val_mean_absolute_error: 2.  
2365  
443 Epoch 200/10000  
444 - 14s - loss: 6.6714 -  
mean_absolute_error: 2.0315 - val_loss  
: 7.4879 - val_mean_absolute_error: 2.  
1011  
445 Epoch 201/10000  
446 - 14s - loss: 6.6302 -  
mean_absolute_error: 2.0226 - val_loss  
: 7.1397 - val_mean_absolute_error: 2.  
1763  
447 Epoch 202/10000  
448 - 14s - loss: 6.6368 -
```

```
448 mean_absolute_error: 2.0200 - val_loss
    : 7.0461 - val_mean_absolute_error: 2.
1372
449 Epoch 203/10000
450   - 13s - loss: 6.6761 -
    mean_absolute_error: 2.0208 - val_loss
    : 7.1976 - val_mean_absolute_error: 2.
0917
451 Epoch 204/10000
452   - 14s - loss: 6.6034 -
    mean_absolute_error: 2.0133 - val_loss
    : 7.6061 - val_mean_absolute_error: 2.
2708
453 Epoch 205/10000
454   - 13s - loss: 6.6269 -
    mean_absolute_error: 2.0193 - val_loss
    : 7.0754 - val_mean_absolute_error: 2.
1354
455 Epoch 206/10000
456   - 13s - loss: 6.5729 -
    mean_absolute_error: 2.0103 - val_loss
    : 8.7651 - val_mean_absolute_error: 2.
4588
457 Epoch 207/10000
```

```
458 - 14s - loss: 6.6734 -  
mean_absolute_error: 2.0229 - val_loss  
: 7.1126 - val_mean_absolute_error: 2.  
1651  
459 Epoch 208/10000  
460 - 14s - loss: 6.6401 -  
mean_absolute_error: 2.0242 - val_loss  
: 7.2435 - val_mean_absolute_error: 2.  
1928  
461 Epoch 209/10000  
462 - 14s - loss: 6.6114 -  
mean_absolute_error: 2.0124 - val_loss  
: 8.3595 - val_mean_absolute_error: 2.  
1753  
463 Epoch 210/10000  
464 - 14s - loss: 6.6418 -  
mean_absolute_error: 2.0224 - val_loss  
: 7.0482 - val_mean_absolute_error: 2.  
0960  
465 Epoch 211/10000  
466 - 14s - loss: 6.6475 -  
mean_absolute_error: 2.0160 - val_loss  
: 7.3428 - val_mean_absolute_error: 2.  
2226
```

```
467 Epoch 212/10000
468   - 14s - loss: 6.6398 -
      mean_absolute_error: 2.0152 - val_loss
      : 7.0169 - val_mean_absolute_error: 2.
      0971
469 Epoch 213/10000
470   - 14s - loss: 6.6065 -
      mean_absolute_error: 2.0102 - val_loss
      : 7.8992 - val_mean_absolute_error: 2.
      3338
471 Epoch 214/10000
472   - 14s - loss: 6.6202 -
      mean_absolute_error: 2.0099 - val_loss
      : 7.3046 - val_mean_absolute_error: 2.
      2114
473 Epoch 215/10000
474   - 14s - loss: 6.5634 -
      mean_absolute_error: 2.0082 - val_loss
      : 7.0776 - val_mean_absolute_error: 2.
      1419
475 Epoch 216/10000
476   - 14s - loss: 6.5768 -
      mean_absolute_error: 2.0080 - val_loss
      : 8.3892 - val_mean_absolute_error: 2.
```



```
476 4201
477 Epoch 217/10000
478   - 14s - loss: 6.5251 -
      mean_absolute_error: 2.0028 - val_loss
      : 7.5800 - val_mean_absolute_error: 2.
1276
479 Epoch 218/10000
480   - 14s - loss: 6.5230 -
      mean_absolute_error: 1.9969 - val_loss
      : 7.4849 - val_mean_absolute_error: 2.
1102
481 Epoch 219/10000
482   - 14s - loss: 6.5318 -
      mean_absolute_error: 2.0031 - val_loss
      : 7.4214 - val_mean_absolute_error: 2.
1312
483 Epoch 220/10000
484   - 14s - loss: 6.5252 -
      mean_absolute_error: 2.0161 - val_loss
      : 7.6633 - val_mean_absolute_error: 2.
2577
485 Epoch 221/10000
486   - 14s - loss: 6.5566 -
      mean_absolute_error: 2.0114 - val_loss
```

```
486 : 7.2341 - val_mean_absolute_error: 2.
1501
487 Epoch 222/10000
488 - 14s - loss: 6.5352 -
mean_absolute_error: 1.9975 - val_loss
: 7.0340 - val_mean_absolute_error: 2.
1380
489 Epoch 223/10000
490 - 14s - loss: 6.5553 -
mean_absolute_error: 2.0027 - val_loss
: 8.2433 - val_mean_absolute_error: 2.
3867
491 Epoch 224/10000
492 - 14s - loss: 6.4948 -
mean_absolute_error: 1.9958 - val_loss
: 7.2503 - val_mean_absolute_error: 2.
1320
493 Epoch 225/10000
494 - 14s - loss: 6.5440 -
mean_absolute_error: 2.0056 - val_loss
: 7.5215 - val_mean_absolute_error: 2.
0976
495 Epoch 226/10000
496 - 14s - loss: 6.4798 -
```

```
496 mean_absolute_error: 2.0004 - val_loss
    : 7.9689 - val_mean_absolute_error: 2.
1649
497 Epoch 227/10000
498   - 14s - loss: 6.4799 -
    mean_absolute_error: 1.9931 - val_loss
    : 7.6830 - val_mean_absolute_error: 2.
1701
499 Epoch 228/10000
500   - 14s - loss: 6.4795 -
    mean_absolute_error: 1.9943 - val_loss
    : 7.0797 - val_mean_absolute_error: 2.
1311
501 Epoch 229/10000
502   - 14s - loss: 6.5033 -
    mean_absolute_error: 1.9958 - val_loss
    : 7.3690 - val_mean_absolute_error: 2.
1034
503 Epoch 230/10000
504   - 14s - loss: 6.4220 -
    mean_absolute_error: 1.9872 - val_loss
    : 7.1034 - val_mean_absolute_error: 2.
1610
505 Epoch 231/10000
```

```
506 - 14s - loss: 6.4773 -  
mean_absolute_error: 1.9996 - val_loss  
: 7.1704 - val_mean_absolute_error: 2.  
1638  
507 Epoch 232/10000  
508 - 14s - loss: 6.4693 -  
mean_absolute_error: 1.9911 - val_loss  
: 8.3095 - val_mean_absolute_error: 2.  
1768  
509 Epoch 233/10000  
510 - 14s - loss: 6.3960 -  
mean_absolute_error: 1.9833 - val_loss  
: 7.4632 - val_mean_absolute_error: 2.  
1216  
511 Epoch 234/10000  
512 - 14s - loss: 6.4471 -  
mean_absolute_error: 1.9887 - val_loss  
: 7.1970 - val_mean_absolute_error: 2.  
1078  
513 Epoch 235/10000  
514 - 14s - loss: 6.4301 -  
mean_absolute_error: 1.9898 - val_loss  
: 7.1201 - val_mean_absolute_error: 2.  
1399
```

```
515 Epoch 236/10000
516   - 14s - loss: 6.4070 -
      mean_absolute_error: 1.9838 - val_loss
      : 7.2272 - val_mean_absolute_error: 2.
      1948
517 Epoch 237/10000
518   - 14s - loss: 6.3790 -
      mean_absolute_error: 1.9806 - val_loss
      : 7.1335 - val_mean_absolute_error: 2.
      1206
519 Epoch 238/10000
520   - 14s - loss: 6.3723 -
      mean_absolute_error: 1.9901 - val_loss
      : 7.1842 - val_mean_absolute_error: 2.
      1432
521 Epoch 239/10000
522   - 14s - loss: 6.3904 -
      mean_absolute_error: 1.9804 - val_loss
      : 8.7894 - val_mean_absolute_error: 2.
      4177
523 Epoch 240/10000
524   - 14s - loss: 6.4500 -
      mean_absolute_error: 1.9842 - val_loss
      : 7.4319 - val_mean_absolute_error: 2.
```

```
524 1357
525 Epoch 241/10000
526 - 14s - loss: 6.3265 -
mean_absolute_error: 1.9744 - val_loss
: 7.5240 - val_mean_absolute_error: 2.
1213
527 Epoch 242/10000
528 - 14s - loss: 6.4098 -
mean_absolute_error: 1.9728 - val_loss
: 7.2898 - val_mean_absolute_error: 2.
1700
529 Epoch 243/10000
530 - 14s - loss: 6.3624 -
mean_absolute_error: 1.9734 - val_loss
: 7.2888 - val_mean_absolute_error: 2.
1294
531 Epoch 244/10000
532 - 14s - loss: 6.3541 -
mean_absolute_error: 1.9647 - val_loss
: 7.6543 - val_mean_absolute_error: 2.
1980
533 Epoch 245/10000
534 - 14s - loss: 6.3760 -
mean_absolute_error: 1.9861 - val_loss
```

```
534 : 7.2028 - val_mean_absolute_error: 2.
    1621
535 Epoch 246/10000
536 - 14s - loss: 6.3301 -
    mean_absolute_error: 1.9700 - val_loss
    : 7.1145 - val_mean_absolute_error: 2.
    1198
537 Epoch 247/10000
538 - 14s - loss: 6.2979 -
    mean_absolute_error: 1.9600 - val_loss
    : 7.0805 - val_mean_absolute_error: 2.
    1236
539 Epoch 248/10000
540 - 14s - loss: 6.2591 -
    mean_absolute_error: 1.9631 - val_loss
    : 7.1302 - val_mean_absolute_error: 2.
    1029
541 Epoch 249/10000
542 - 14s - loss: 6.3535 -
    mean_absolute_error: 1.9728 - val_loss
    : 7.1301 - val_mean_absolute_error: 2.
    1105
543 Epoch 250/10000
544 - 14s - loss: 6.3209 -
```

```
544 mean_absolute_error: 1.9682 - val_loss
    : 7.2944 - val_mean_absolute_error: 2.
1091
545 Epoch 251/10000
546   - 14s - loss: 6.2396 -
    mean_absolute_error: 1.9651 - val_loss
    : 7.1990 - val_mean_absolute_error: 2.
1858
547 Epoch 252/10000
548   - 14s - loss: 6.2593 -
    mean_absolute_error: 1.9571 - val_loss
    : 7.3157 - val_mean_absolute_error: 2.
1012
549 Epoch 253/10000
550   - 14s - loss: 6.2693 -
    mean_absolute_error: 1.9608 - val_loss
    : 7.9666 - val_mean_absolute_error: 2.
2917
551 Epoch 254/10000
552   - 14s - loss: 6.2222 -
    mean_absolute_error: 1.9503 - val_loss
    : 7.2027 - val_mean_absolute_error: 2.
1459
553 Epoch 255/10000
```



```
554 - 14s - loss: 6.1862 -  
mean_absolute_error: 1.9539 - val_loss  
: 7.3983 - val_mean_absolute_error: 2.  
1106  
555 Epoch 256/10000  
556 - 14s - loss: 6.2683 -  
mean_absolute_error: 1.9580 - val_loss  
: 7.4222 - val_mean_absolute_error: 2.  
2327  
557 Epoch 257/10000  
558 - 14s - loss: 6.2662 -  
mean_absolute_error: 1.9683 - val_loss  
: 9.0525 - val_mean_absolute_error: 2.  
2501  
559 Epoch 258/10000  
560 - 14s - loss: 6.2192 -  
mean_absolute_error: 1.9473 - val_loss  
: 7.5234 - val_mean_absolute_error: 2.  
2575  
561 Epoch 259/10000  
562 - 14s - loss: 6.1824 -  
mean_absolute_error: 1.9570 - val_loss  
: 7.3319 - val_mean_absolute_error: 2.  
1666
```

```
563 Epoch 260/10000
564   - 14s - loss: 6.1837 -
      mean_absolute_error: 1.9514 - val_loss
      : 7.4751 - val_mean_absolute_error: 2.
      1090
565 Epoch 261/10000
566   - 14s - loss: 6.0932 -
      mean_absolute_error: 1.9371 - val_loss
      : 7.5913 - val_mean_absolute_error: 2.
      2630
567 Epoch 262/10000
568   - 14s - loss: 6.1546 -
      mean_absolute_error: 1.9349 - val_loss
      : 7.9692 - val_mean_absolute_error: 2.
      1562
569 Epoch 263/10000
570   - 14s - loss: 6.1331 -
      mean_absolute_error: 1.9305 - val_loss
      : 7.8572 - val_mean_absolute_error: 2.
      3334
571 Epoch 264/10000
572   - 14s - loss: 6.1483 -
      mean_absolute_error: 1.9425 - val_loss
      : 7.1322 - val_mean_absolute_error: 2.
```

```
572 1179
573 Epoch 265/10000
574   - 14s - loss: 6.1585 -
    mean_absolute_error: 1.9568 - val_loss
    : 7.3611 - val_mean_absolute_error: 2.
1127
575 Epoch 266/10000
576   - 14s - loss: 6.1471 -
    mean_absolute_error: 1.9447 - val_loss
    : 7.4644 - val_mean_absolute_error: 2.
2448
577 Epoch 267/10000
578   - 14s - loss: 6.1244 -
    mean_absolute_error: 1.9461 - val_loss
    : 7.2163 - val_mean_absolute_error: 2.
1120
579 Epoch 268/10000
580   - 14s - loss: 6.0410 -
    mean_absolute_error: 1.9266 - val_loss
    : 8.0369 - val_mean_absolute_error: 2.
1600
581 Epoch 269/10000
582   - 14s - loss: 6.0019 -
    mean_absolute_error: 1.9169 - val_loss
```

```
582 : 7.3075 - val_mean_absolute_error: 2.  
1465  
583 Epoch 270/10000  
584 - 14s - loss: 6.0877 -  
mean_absolute_error: 1.9372 - val_loss  
: 8.1866 - val_mean_absolute_error: 2.  
2665  
585 Epoch 271/10000  
586 - 14s - loss: 6.1065 -  
mean_absolute_error: 1.9403 - val_loss  
: 7.2736 - val_mean_absolute_error: 2.  
1155  
587 Epoch 272/10000  
588 - 14s - loss: 6.0345 -  
mean_absolute_error: 1.9199 - val_loss  
: 7.3225 - val_mean_absolute_error: 2.  
1917  
589 Epoch 273/10000  
590 - 14s - loss: 6.0457 -  
mean_absolute_error: 1.9216 - val_loss  
: 7.2181 - val_mean_absolute_error: 2.  
1066  
591 Epoch 274/10000  
592 - 14s - loss: 6.0091 -
```

```
592 mean_absolute_error: 1.9086 - val_loss
    : 7.9121 - val_mean_absolute_error: 2.
    1768
```

```
593 Epoch 275/10000
```

```
594   - 14s - loss: 6.0219 -
    mean_absolute_error: 1.9210 - val_loss
    : 7.6316 - val_mean_absolute_error: 2.
    2457
```

```
595 Epoch 276/10000
```

```
596   - 14s - loss: 6.0315 -
    mean_absolute_error: 1.9311 - val_loss
    : 7.7101 - val_mean_absolute_error: 2.
    1703
```

```
597 Epoch 277/10000
```

```
598   - 14s - loss: 5.9962 -
    mean_absolute_error: 1.9147 - val_loss
    : 7.2935 - val_mean_absolute_error: 2.
    1473
```

```
599 Epoch 278/10000
```

```
600   - 14s - loss: 5.9388 -
    mean_absolute_error: 1.9097 - val_loss
    : 7.4409 - val_mean_absolute_error: 2.
    1613
```

```
601 Epoch 279/10000
```

```
602 - 14s - loss: 6.0372 -  
mean_absolute_error: 1.9306 - val_loss  
: 7.2615 - val_mean_absolute_error: 2.  
1140  
603 Epoch 280/10000  
604 - 14s - loss: 5.9962 -  
mean_absolute_error: 1.9205 - val_loss  
: 7.4564 - val_mean_absolute_error: 2.  
2092  
605 Epoch 281/10000  
606 - 14s - loss: 5.9453 -  
mean_absolute_error: 1.9094 - val_loss  
: 7.7104 - val_mean_absolute_error: 2.  
2632  
607 Epoch 282/10000  
608 - 14s - loss: 5.8716 -  
mean_absolute_error: 1.9008 - val_loss  
: 9.3676 - val_mean_absolute_error: 2.  
3089  
609 Epoch 283/10000  
610 - 14s - loss: 5.9899 -  
mean_absolute_error: 1.9149 - val_loss  
: 7.6528 - val_mean_absolute_error: 2.  
2391
```

```
611 Epoch 284/10000
612   - 14s - loss: 5.9423 -
      mean_absolute_error: 1.9042 - val_loss
      : 7.6938 - val_mean_absolute_error: 2.
      1339
613 Epoch 285/10000
614   - 14s - loss: 5.8393 -
      mean_absolute_error: 1.8945 - val_loss
      : 7.2467 - val_mean_absolute_error: 2.
      1099
615 Epoch 286/10000
616   - 14s - loss: 5.9213 -
      mean_absolute_error: 1.9104 - val_loss
      : 7.9639 - val_mean_absolute_error: 2.
      1503
617 Epoch 287/10000
618   - 14s - loss: 5.8564 -
      mean_absolute_error: 1.8882 - val_loss
      : 7.3423 - val_mean_absolute_error: 2.
      1897
619 Epoch 288/10000
620   - 14s - loss: 5.8723 -
      mean_absolute_error: 1.9035 - val_loss
      : 7.5370 - val_mean_absolute_error: 2.
```

```
620 1256
621 Epoch 289/10000
622 - 14s - loss: 5.8058 -
    mean_absolute_error: 1.8860 - val_loss
    : 8.2097 - val_mean_absolute_error: 2.
    1802
623 Epoch 290/10000
624 - 14s - loss: 5.8412 -
    mean_absolute_error: 1.8920 - val_loss
    : 8.0120 - val_mean_absolute_error: 2.
    1784
625 Epoch 291/10000
626 - 14s - loss: 5.8124 -
    mean_absolute_error: 1.8889 - val_loss
    : 7.5314 - val_mean_absolute_error: 2.
    2338
627 Epoch 292/10000
628 - 14s - loss: 5.8267 -
    mean_absolute_error: 1.8916 - val_loss
    : 7.3676 - val_mean_absolute_error: 2.
    1848
629 Epoch 293/10000
630 - 14s - loss: 5.8372 -
    mean_absolute_error: 1.8971 - val_loss
```



```
630 : 7.2698 - val_mean_absolute_error: 2.
    1599
631 Epoch 294/10000
632 - 14s - loss: 5.8334 -
    mean_absolute_error: 1.8858 - val_loss
    : 7.2628 - val_mean_absolute_error: 2.
    1311
633
634 Epoch 00294: ReduceLR0nPlateau reducing
    learning rate to 0.000100000000475.
635 Epoch 295/10000
636 - 14s - loss: 5.2621 -
    mean_absolute_error: 1.7963 - val_loss
    : 7.3387 - val_mean_absolute_error: 2.
    1506
637 Epoch 296/10000
638 - 14s - loss: 5.2435 -
    mean_absolute_error: 1.7919 - val_loss
    : 7.3497 - val_mean_absolute_error: 2.
    1672
639 Epoch 297/10000
640 - 14s - loss: 5.2341 -
    mean_absolute_error: 1.7961 - val_loss
    : 7.3460 - val_mean_absolute_error: 2.
```

```
640 1509
641 Epoch 298/10000
642 - 14s - loss: 5.2188 -
    mean_absolute_error: 1.7862 - val_loss
    : 7.3678 - val_mean_absolute_error: 2.
1590
643 Epoch 299/10000
644 - 14s - loss: 5.2152 -
    mean_absolute_error: 1.7900 - val_loss
    : 7.4468 - val_mean_absolute_error: 2.
1501
645 Epoch 300/10000
646 - 14s - loss: 5.1947 -
    mean_absolute_error: 1.7883 - val_loss
    : 7.3722 - val_mean_absolute_error: 2.
1355
647 Epoch 301/10000
648 - 14s - loss: 5.1983 -
    mean_absolute_error: 1.7836 - val_loss
    : 7.3259 - val_mean_absolute_error: 2.
1432
649 Epoch 302/10000
650 - 14s - loss: 5.2012 -
    mean_absolute_error: 1.7867 - val_loss
```

```
650 : 7.3244 - val_mean_absolute_error: 2.
1456
651 Epoch 303/10000
652 - 14s - loss: 5.2033 -
mean_absolute_error: 1.7846 - val_loss
: 7.4385 - val_mean_absolute_error: 2.
1867
653 Epoch 304/10000
654 - 14s - loss: 5.1814 -
mean_absolute_error: 1.7869 - val_loss
: 7.3509 - val_mean_absolute_error: 2.
1512
655 Epoch 305/10000
656 - 14s - loss: 5.1870 -
mean_absolute_error: 1.7829 - val_loss
: 7.3747 - val_mean_absolute_error: 2.
1718
657 Epoch 306/10000
658 - 14s - loss: 5.1771 -
mean_absolute_error: 1.7834 - val_loss
: 7.3967 - val_mean_absolute_error: 2.
1703
659 Epoch 307/10000
660 - 14s - loss: 5.1614 -
```

```
660 mean_absolute_error: 1.7795 - val_loss
    : 7.4570 - val_mean_absolute_error: 2.
1586
661 Epoch 308/10000
662   - 14s - loss: 5.1736 -
    mean_absolute_error: 1.7823 - val_loss
    : 7.3946 - val_mean_absolute_error: 2.
1545
663 Epoch 309/10000
664   - 14s - loss: 5.1640 -
    mean_absolute_error: 1.7779 - val_loss
    : 7.3903 - val_mean_absolute_error: 2.
1623
665 Epoch 310/10000
666   - 14s - loss: 5.1765 -
    mean_absolute_error: 1.7813 - val_loss
    : 7.3498 - val_mean_absolute_error: 2.
1506
667 Epoch 311/10000
668   - 14s - loss: 5.1578 -
    mean_absolute_error: 1.7771 - val_loss
    : 7.3612 - val_mean_absolute_error: 2.
1657
669 Epoch 312/10000
```

```
670   - 14s - loss: 5.1615 -  
      mean_absolute_error: 1.7836 - val_loss  
      : 7.3683 - val_mean_absolute_error: 2.  
      1615  
671 Epoch 313/10000  
672   - 14s - loss: 5.1421 -  
      mean_absolute_error: 1.7741 - val_loss  
      : 7.3771 - val_mean_absolute_error: 2.  
      1694  
673 Epoch 314/10000  
674   - 14s - loss: 5.1428 -  
      mean_absolute_error: 1.7777 - val_loss  
      : 7.3998 - val_mean_absolute_error: 2.  
      1580  
675 Epoch 315/10000  
676   - 14s - loss: 5.1388 -  
      mean_absolute_error: 1.7754 - val_loss  
      : 7.4049 - val_mean_absolute_error: 2.  
      1764  
677 Epoch 316/10000  
678   - 14s - loss: 5.1331 -  
      mean_absolute_error: 1.7782 - val_loss  
      : 7.4056 - val_mean_absolute_error: 2.  
      1528
```

```
679 Epoch 317/10000
680   - 14s - loss: 5.1287 -
      mean_absolute_error: 1.7705 - val_loss
      : 7.4105 - val_mean_absolute_error: 2.
      1641
681 Epoch 318/10000
682   - 14s - loss: 5.1383 -
      mean_absolute_error: 1.7758 - val_loss
      : 7.3848 - val_mean_absolute_error: 2.
      1539
683 Epoch 319/10000
684   - 14s - loss: 5.1190 -
      mean_absolute_error: 1.7733 - val_loss
      : 7.3502 - val_mean_absolute_error: 2.
      1563
685 Epoch 320/10000
686   - 14s - loss: 5.1174 -
      mean_absolute_error: 1.7739 - val_loss
      : 7.4063 - val_mean_absolute_error: 2.
      1662
687 Epoch 321/10000
688   - 14s - loss: 5.1172 -
      mean_absolute_error: 1.7721 - val_loss
      : 7.4634 - val_mean_absolute_error: 2.
```

```
688 1898
689 Epoch 322/10000
690   - 14s - loss: 5.1278 -
      mean_absolute_error: 1.7744 - val_loss
      : 7.4319 - val_mean_absolute_error: 2.
      1576
691 Epoch 323/10000
692   - 14s - loss: 5.1096 -
      mean_absolute_error: 1.7725 - val_loss
      : 7.4869 - val_mean_absolute_error: 2.
      1540
693 Epoch 324/10000
694   - 14s - loss: 5.1087 -
      mean_absolute_error: 1.7716 - val_loss
      : 7.4001 - val_mean_absolute_error: 2.
      1607
695 Epoch 325/10000
696   - 14s - loss: 5.1016 -
      mean_absolute_error: 1.7670 - val_loss
      : 7.4250 - val_mean_absolute_error: 2.
      1634
697 Epoch 326/10000
698   - 14s - loss: 5.0906 -
      mean_absolute_error: 1.7708 - val_loss
```

```
698 : 7.4213 - val_mean_absolute_error: 2.  
1603  
699 Epoch 327/10000  
700 - 14s - loss: 5.0873 -  
mean_absolute_error: 1.7674 - val_loss  
: 7.4327 - val_mean_absolute_error: 2.  
1585  
701 Epoch 328/10000  
702 - 14s - loss: 5.0854 -  
mean_absolute_error: 1.7658 - val_loss  
: 7.4109 - val_mean_absolute_error: 2.  
1715  
703 Epoch 329/10000  
704 - 14s - loss: 5.0887 -  
mean_absolute_error: 1.7627 - val_loss  
: 7.4281 - val_mean_absolute_error: 2.  
1647  
705 Epoch 330/10000  
706 - 14s - loss: 5.0738 -  
mean_absolute_error: 1.7663 - val_loss  
: 7.5142 - val_mean_absolute_error: 2.  
1845  
707 Epoch 331/10000  
708 - 14s - loss: 5.0816 -
```



```
708 mean_absolute_error: 1.7670 - val_loss
    : 7.4448 - val_mean_absolute_error: 2.
1616
709 Epoch 332/10000
710   - 14s - loss: 5.0589 -
    mean_absolute_error: 1.7621 - val_loss
    : 7.5492 - val_mean_absolute_error: 2.
1980
711 Epoch 333/10000
712   - 14s - loss: 5.0614 -
    mean_absolute_error: 1.7613 - val_loss
    : 7.4651 - val_mean_absolute_error: 2.
1850
713 Epoch 334/10000
714   - 14s - loss: 5.0546 -
    mean_absolute_error: 1.7607 - val_loss
    : 7.4962 - val_mean_absolute_error: 2.
1745
715 Epoch 335/10000
716   - 14s - loss: 5.0597 -
    mean_absolute_error: 1.7610 - val_loss
    : 7.4447 - val_mean_absolute_error: 2.
1768
717 Epoch 336/10000
```

```
718 - 14s - loss: 5.0501 -  
mean_absolute_error: 1.7620 - val_loss  
: 7.4732 - val_mean_absolute_error: 2.  
1717  
719 Epoch 337/10000  
720 - 14s - loss: 5.0576 -  
mean_absolute_error: 1.7635 - val_loss  
: 7.4586 - val_mean_absolute_error: 2.  
1736  
721 Epoch 338/10000  
722 - 14s - loss: 5.0449 -  
mean_absolute_error: 1.7603 - val_loss  
: 7.4269 - val_mean_absolute_error: 2.  
1708  
723 Epoch 339/10000  
724 - 14s - loss: 5.0480 -  
mean_absolute_error: 1.7584 - val_loss  
: 7.4506 - val_mean_absolute_error: 2.  
1746  
725 Epoch 340/10000  
726 - 14s - loss: 5.0386 -  
mean_absolute_error: 1.7600 - val_loss  
: 7.5380 - val_mean_absolute_error: 2.  
1622
```

```
727 Epoch 341/10000
728   - 14s - loss: 5.0424 -
      mean_absolute_error: 1.7541 - val_loss
      : 7.5164 - val_mean_absolute_error: 2.
      2013
729 Epoch 342/10000
730   - 14s - loss: 5.0258 -
      mean_absolute_error: 1.7555 - val_loss
      : 7.4782 - val_mean_absolute_error: 2.
      1713
731 Epoch 343/10000
732   - 14s - loss: 5.0260 -
      mean_absolute_error: 1.7588 - val_loss
      : 7.4742 - val_mean_absolute_error: 2.
      1577
733 Epoch 344/10000
734   - 14s - loss: 5.0272 -
      mean_absolute_error: 1.7552 - val_loss
      : 7.4424 - val_mean_absolute_error: 2.
      1704
735 Epoch 345/10000
736   - 14s - loss: 5.0346 -
      mean_absolute_error: 1.7572 - val_loss
      : 7.4511 - val_mean_absolute_error: 2.
```

```
736 1604
737 Epoch 346/10000
738 - 14s - loss: 5.0183 -
mean_absolute_error: 1.7521 - val_loss
: 7.4822 - val_mean_absolute_error: 2.
1750
739 Epoch 347/10000
740 - 14s - loss: 5.0080 -
mean_absolute_error: 1.7534 - val_loss
: 7.5211 - val_mean_absolute_error: 2.
1664
741 Epoch 348/10000
742 - 14s - loss: 5.0034 -
mean_absolute_error: 1.7498 - val_loss
: 7.6820 - val_mean_absolute_error: 2.
2164
743 Epoch 349/10000
744 - 14s - loss: 5.0167 -
mean_absolute_error: 1.7557 - val_loss
: 7.4867 - val_mean_absolute_error: 2.
1694
745 Epoch 350/10000
746 - 14s - loss: 5.0041 -
mean_absolute_error: 1.7493 - val_loss
```

```
746 : 7.4614 - val_mean_absolute_error: 2.
1658
747 Epoch 351/10000
748 - 14s - loss: 5.0089 -
mean_absolute_error: 1.7524 - val_loss
: 7.4769 - val_mean_absolute_error: 2.
1695
749 Epoch 352/10000
750 - 14s - loss: 4.9856 -
mean_absolute_error: 1.7487 - val_loss
: 7.4967 - val_mean_absolute_error: 2.
1896
751 Epoch 353/10000
752 - 14s - loss: 4.9933 -
mean_absolute_error: 1.7538 - val_loss
: 7.5074 - val_mean_absolute_error: 2.
1720
753 Epoch 354/10000
754 - 14s - loss: 4.9826 -
mean_absolute_error: 1.7479 - val_loss
: 7.5151 - val_mean_absolute_error: 2.
1783
755 Epoch 355/10000
756 - 14s - loss: 4.9883 -
```

```
756 mean_absolute_error: 1.7524 - val_loss
    : 7.5624 - val_mean_absolute_error: 2.
1789
757 Epoch 356/10000
758   - 14s - loss: 4.9819 -
    mean_absolute_error: 1.7492 - val_loss
    : 7.4951 - val_mean_absolute_error: 2.
1738
759 Epoch 357/10000
760   - 14s - loss: 4.9769 -
    mean_absolute_error: 1.7460 - val_loss
    : 7.5419 - val_mean_absolute_error: 2.
1678
761 Epoch 358/10000
762   - 14s - loss: 4.9807 -
    mean_absolute_error: 1.7462 - val_loss
    : 7.5216 - val_mean_absolute_error: 2.
1769
763 Epoch 359/10000
764   - 14s - loss: 4.9816 -
    mean_absolute_error: 1.7504 - val_loss
    : 7.5079 - val_mean_absolute_error: 2.
1757
765 Epoch 360/10000
```

```
766 - 14s - loss: 4.9711 -  
mean_absolute_error: 1.7445 - val_loss  
: 7.5307 - val_mean_absolute_error: 2.  
1716  
767 Epoch 361/10000  
768 - 14s - loss: 4.9658 -  
mean_absolute_error: 1.7460 - val_loss  
: 7.5512 - val_mean_absolute_error: 2.  
1687  
769 Epoch 362/10000  
770 - 14s - loss: 4.9547 -  
mean_absolute_error: 1.7382 - val_loss  
: 7.6182 - val_mean_absolute_error: 2.  
2263  
771 Epoch 363/10000  
772 - 14s - loss: 4.9516 -  
mean_absolute_error: 1.7423 - val_loss  
: 7.5294 - val_mean_absolute_error: 2.  
1839  
773 Epoch 364/10000  
774 - 14s - loss: 4.9459 -  
mean_absolute_error: 1.7430 - val_loss  
: 7.5305 - val_mean_absolute_error: 2.  
1679
```

```
775 Epoch 365/10000
776   - 14s - loss: 4.9602 -
      mean_absolute_error: 1.7421 - val_loss
      : 7.5140 - val_mean_absolute_error: 2.
      1644
777 Epoch 366/10000
778   - 14s - loss: 4.9357 -
      mean_absolute_error: 1.7360 - val_loss
      : 7.6136 - val_mean_absolute_error: 2.
      1922
779 Epoch 367/10000
780   - 14s - loss: 4.9289 -
      mean_absolute_error: 1.7408 - val_loss
      : 7.4965 - val_mean_absolute_error: 2.
      1657
781 Epoch 368/10000
782   - 14s - loss: 4.9312 -
      mean_absolute_error: 1.7361 - val_loss
      : 7.5034 - val_mean_absolute_error: 2.
      1915
783 Epoch 369/10000
784   - 14s - loss: 4.9338 -
      mean_absolute_error: 1.7399 - val_loss
      : 7.5617 - val_mean_absolute_error: 2.
```



```
784 1718
785 Epoch 370/10000
786 - 14s - loss: 4.9269 -
    mean_absolute_error: 1.7371 - val_loss
    : 7.5260 - val_mean_absolute_error: 2.
1887
787 Epoch 371/10000
788 - 14s - loss: 4.9144 -
    mean_absolute_error: 1.7372 - val_loss
    : 7.6297 - val_mean_absolute_error: 2.
1700
789 Epoch 372/10000
790 - 14s - loss: 4.9291 -
    mean_absolute_error: 1.7386 - val_loss
    : 7.6294 - val_mean_absolute_error: 2.
1694
791 Epoch 373/10000
792 - 14s - loss: 4.9052 -
    mean_absolute_error: 1.7354 - val_loss
    : 7.5556 - val_mean_absolute_error: 2.
1676
793 Epoch 374/10000
794 - 14s - loss: 4.9242 -
    mean_absolute_error: 1.7374 - val_loss
```

```
794 : 7.5650 - val_mean_absolute_error: 2.  
1949  
795 Epoch 375/10000  
796 - 14s - loss: 4.9136 -  
mean_absolute_error: 1.7329 - val_loss  
: 7.5535 - val_mean_absolute_error: 2.  
1975  
797 Epoch 376/10000  
798 - 14s - loss: 4.9211 -  
mean_absolute_error: 1.7376 - val_loss  
: 7.5935 - val_mean_absolute_error: 2.  
1877  
799 Epoch 377/10000  
800 - 14s - loss: 4.8775 -  
mean_absolute_error: 1.7309 - val_loss  
: 7.6285 - val_mean_absolute_error: 2.  
2082  
801 Epoch 378/10000  
802 - 14s - loss: 4.9033 -  
mean_absolute_error: 1.7349 - val_loss  
: 7.5879 - val_mean_absolute_error: 2.  
1779  
803 Epoch 379/10000  
804 - 14s - loss: 4.8993 -
```

```
804 mean_absolute_error: 1.7327 - val_loss
    : 7.5488 - val_mean_absolute_error: 2.
1864
805 Epoch 380/10000
806   - 14s - loss: 4.8968 -
    mean_absolute_error: 1.7343 - val_loss
    : 7.5503 - val_mean_absolute_error: 2.
1706
807 Epoch 381/10000
808   - 14s - loss: 4.9018 -
    mean_absolute_error: 1.7330 - val_loss
    : 7.6146 - val_mean_absolute_error: 2.
2034
809 Epoch 382/10000
810   - 14s - loss: 4.8820 -
    mean_absolute_error: 1.7278 - val_loss
    : 7.5665 - val_mean_absolute_error: 2.
1772
811 Epoch 383/10000
812   - 14s - loss: 4.8916 -
    mean_absolute_error: 1.7316 - val_loss
    : 7.5736 - val_mean_absolute_error: 2.
1799
813 Epoch 384/10000
```

```
814 - 14s - loss: 4.8841 -  
mean_absolute_error: 1.7264 - val_loss  
: 7.7261 - val_mean_absolute_error: 2.  
1966  
815 Epoch 385/10000  
816 - 14s - loss: 4.8908 -  
mean_absolute_error: 1.7281 - val_loss  
: 7.6412 - val_mean_absolute_error: 2.  
1807  
817 Epoch 386/10000  
818 - 14s - loss: 4.8873 -  
mean_absolute_error: 1.7300 - val_loss  
: 7.5495 - val_mean_absolute_error: 2.  
1721  
819 Epoch 387/10000  
820 - 14s - loss: 4.8652 -  
mean_absolute_error: 1.7268 - val_loss  
: 7.5903 - val_mean_absolute_error: 2.  
1919  
821 Epoch 388/10000  
822 - 14s - loss: 4.8670 -  
mean_absolute_error: 1.7306 - val_loss  
: 7.5447 - val_mean_absolute_error: 2.  
1764
```

```
823 Epoch 389/10000
824   - 14s - loss: 4.8599 -
      mean_absolute_error: 1.7275 - val_loss
      : 7.5732 - val_mean_absolute_error: 2.
      1874
825 Epoch 390/10000
826   - 14s - loss: 4.8626 -
      mean_absolute_error: 1.7283 - val_loss
      : 7.5744 - val_mean_absolute_error: 2.
      1701
827 Epoch 391/10000
828   - 14s - loss: 4.8623 -
      mean_absolute_error: 1.7280 - val_loss
      : 7.5664 - val_mean_absolute_error: 2.
      1960
829 Epoch 392/10000
830   - 14s - loss: 4.8648 -
      mean_absolute_error: 1.7283 - val_loss
      : 7.6072 - val_mean_absolute_error: 2.
      1819
831 Epoch 393/10000
832   - 14s - loss: 4.8457 -
      mean_absolute_error: 1.7235 - val_loss
      : 7.5916 - val_mean_absolute_error: 2.
```

```
832 1981
833 Epoch 394/10000
834 - 14s - loss: 4.8406 -
    mean_absolute_error: 1.7229 - val_loss
    : 7.7045 - val_mean_absolute_error: 2.
    1754
```

```
835
836 Epoch 00394: ReduceLROnPlateau reducing
    learning rate to 1.0000000475e-05.
```

```
837 Epoch 395/10000
838 - 14s - loss: 4.8062 -
    mean_absolute_error: 1.7071 - val_loss
    : 7.5636 - val_mean_absolute_error: 2.
    1874
```

```
839 Epoch 396/10000
840 - 14s - loss: 4.7859 -
    mean_absolute_error: 1.7139 - val_loss
    : 7.5712 - val_mean_absolute_error: 2.
    1821
```

```
841 Epoch 397/10000
842 - 14s - loss: 4.7841 -
    mean_absolute_error: 1.7129 - val_loss
    : 7.5811 - val_mean_absolute_error: 2.
    1822
```

```
843 Epoch 398/10000
844   - 14s - loss: 4.7821 -
      mean_absolute_error: 1.7119 - val_loss
      : 7.5848 - val_mean_absolute_error: 2.
      1838
845 Epoch 399/10000
846   - 14s - loss: 4.7846 -
      mean_absolute_error: 1.7115 - val_loss
      : 7.5857 - val_mean_absolute_error: 2.
      1885
847 Epoch 400/10000
848   - 14s - loss: 4.7812 -
      mean_absolute_error: 1.7141 - val_loss
      : 7.5857 - val_mean_absolute_error: 2.
      1878
849 Epoch 401/10000
850   - 14s - loss: 4.7752 -
      mean_absolute_error: 1.7080 - val_loss
      : 7.6036 - val_mean_absolute_error: 2.
      1990
851 Epoch 402/10000
852   - 14s - loss: 4.7826 -
      mean_absolute_error: 1.7135 - val_loss
      : 7.5840 - val_mean_absolute_error: 2.
```

```
852 1872
853 Epoch 403/10000
854   - 14s - loss: 4.7808 -
      mean_absolute_error: 1.7120 - val_loss
      : 7.5834 - val_mean_absolute_error: 2.
1892
855 Epoch 404/10000
856   - 14s - loss: 4.7822 -
      mean_absolute_error: 1.7126 - val_loss
      : 7.5867 - val_mean_absolute_error: 2.
1890
857 Epoch 405/10000
858   - 14s - loss: 4.7792 -
      mean_absolute_error: 1.7127 - val_loss
      : 7.5895 - val_mean_absolute_error: 2.
1854
859 Epoch 406/10000
860   - 14s - loss: 4.7811 -
      mean_absolute_error: 1.7128 - val_loss
      : 7.5905 - val_mean_absolute_error: 2.
1855
861 Epoch 407/10000
862   - 14s - loss: 4.7806 -
      mean_absolute_error: 1.7102 - val_loss
```



```
862 : 7.5862 - val_mean_absolute_error: 2.  
1890  
863 Epoch 408/10000  
864 - 14s - loss: 4.7766 -  
mean_absolute_error: 1.7092 - val_loss  
: 7.5928 - val_mean_absolute_error: 2.  
1944  
865 Epoch 409/10000  
866 - 14s - loss: 4.7783 -  
mean_absolute_error: 1.7136 - val_loss  
: 7.5887 - val_mean_absolute_error: 2.  
1863  
867 Epoch 410/10000  
868 - 14s - loss: 4.7775 -  
mean_absolute_error: 1.7106 - val_loss  
: 7.5874 - val_mean_absolute_error: 2.  
1884  
869 Epoch 411/10000  
870 - 14s - loss: 4.7781 -  
mean_absolute_error: 1.7105 - val_loss  
: 7.5888 - val_mean_absolute_error: 2.  
1891  
871 Epoch 412/10000  
872 - 14s - loss: 4.7697 -
```

```
872 mean_absolute_error: 1.7067 - val_loss
    : 7.6059 - val_mean_absolute_error: 2.
2006
873 Epoch 413/10000
874   - 14s - loss: 4.7786 -
    mean_absolute_error: 1.7140 - val_loss
    : 7.5882 - val_mean_absolute_error: 2.
1888
875 Epoch 414/10000
876   - 14s - loss: 4.7781 -
    mean_absolute_error: 1.7123 - val_loss
    : 7.5923 - val_mean_absolute_error: 2.
1878
877 Epoch 415/10000
878   - 14s - loss: 4.7757 -
    mean_absolute_error: 1.7095 - val_loss
    : 7.5938 - val_mean_absolute_error: 2.
1932
879 Epoch 416/10000
880   - 14s - loss: 4.7763 -
    mean_absolute_error: 1.7122 - val_loss
    : 7.5920 - val_mean_absolute_error: 2.
1910
881 Epoch 417/10000
```

```
882 - 14s - loss: 4.7744 -  
mean_absolute_error: 1.7110 - val_loss  
: 7.5906 - val_mean_absolute_error: 2.  
1870  
883 Epoch 418/10000  
884 - 14s - loss: 4.7705 -  
mean_absolute_error: 1.7065 - val_loss  
: 7.6064 - val_mean_absolute_error: 2.  
2002  
885 Epoch 419/10000  
886 - 14s - loss: 4.7747 -  
mean_absolute_error: 1.7139 - val_loss  
: 7.5911 - val_mean_absolute_error: 2.  
1876  
887 Epoch 420/10000  
888 - 14s - loss: 4.7737 -  
mean_absolute_error: 1.7098 - val_loss  
: 7.5923 - val_mean_absolute_error: 2.  
1894  
889 Epoch 421/10000  
890 - 14s - loss: 4.7746 -  
mean_absolute_error: 1.7107 - val_loss  
: 7.5944 - val_mean_absolute_error: 2.  
1880
```

```
891 Epoch 422/10000
892   - 14s - loss: 4.7741 -
      mean_absolute_error: 1.7098 - val_loss
      : 7.5942 - val_mean_absolute_error: 2.
      1911
893 Epoch 423/10000
894   - 14s - loss: 4.7736 -
      mean_absolute_error: 1.7123 - val_loss
      : 7.5938 - val_mean_absolute_error: 2.
      1887
895 Epoch 424/10000
896   - 14s - loss: 4.7716 -
      mean_absolute_error: 1.7112 - val_loss
      : 7.5998 - val_mean_absolute_error: 2.
      1873
897 Epoch 425/10000
898   - 14s - loss: 4.7737 -
      mean_absolute_error: 1.7120 - val_loss
      : 7.5921 - val_mean_absolute_error: 2.
      1896
899 Epoch 426/10000
900   - 14s - loss: 4.7704 -
      mean_absolute_error: 1.7084 - val_loss
      : 7.5960 - val_mean_absolute_error: 2.
```

```
900 1937
901 Epoch 427/10000
902   - 14s - loss: 4.7708 -
    mean_absolute_error: 1.7110 - val_loss
    : 7.6018 - val_mean_absolute_error: 2.
    1944
903 Epoch 428/10000
904   - 14s - loss: 4.7735 -
    mean_absolute_error: 1.7120 - val_loss
    : 7.5954 - val_mean_absolute_error: 2.
    1882
905 Epoch 429/10000
906   - 14s - loss: 4.7706 -
    mean_absolute_error: 1.7090 - val_loss
    : 7.6049 - val_mean_absolute_error: 2.
    1867
907 Epoch 430/10000
908   - 14s - loss: 4.7716 -
    mean_absolute_error: 1.7078 - val_loss
    : 7.5968 - val_mean_absolute_error: 2.
    1942
909 Epoch 431/10000
910   - 14s - loss: 4.7691 -
    mean_absolute_error: 1.7112 - val_loss
```

```
910 : 7.5957 - val_mean_absolute_error: 2.
    1927
911 Epoch 432/10000
912 - 14s - loss: 4.7705 -
    mean_absolute_error: 1.7104 - val_loss
    : 7.5948 - val_mean_absolute_error: 2.
    1870
913 Epoch 433/10000
914 - 14s - loss: 4.7702 -
    mean_absolute_error: 1.7089 - val_loss
    : 7.5974 - val_mean_absolute_error: 2.
    1936
915 Epoch 434/10000
916 - 14s - loss: 4.7688 -
    mean_absolute_error: 1.7099 - val_loss
    : 7.5947 - val_mean_absolute_error: 2.
    1928
917 Epoch 435/10000
918 - 14s - loss: 4.7677 -
    mean_absolute_error: 1.7132 - val_loss
    : 7.5985 - val_mean_absolute_error: 2.
    1881
919 Epoch 436/10000
920 - 14s - loss: 4.7699 -
```

```
920 mean_absolute_error: 1.7091 - val_loss
    : 7.5952 - val_mean_absolute_error: 2.
    1905
921 Epoch 437/10000
922   - 14s - loss: 4.7670 -
    mean_absolute_error: 1.7103 - val_loss
    : 7.6010 - val_mean_absolute_error: 2.
    1885
923 Epoch 438/10000
924   - 14s - loss: 4.7674 -
    mean_absolute_error: 1.7086 - val_loss
    : 7.6057 - val_mean_absolute_error: 2.
    1923
925 Epoch 439/10000
926   - 14s - loss: 4.7687 -
    mean_absolute_error: 1.7094 - val_loss
    : 7.5996 - val_mean_absolute_error: 2.
    1907
927 Epoch 440/10000
928   - 14s - loss: 4.7667 -
    mean_absolute_error: 1.7097 - val_loss
    : 7.5999 - val_mean_absolute_error: 2.
    1878
929 Epoch 441/10000
```

```
930 - 14s - loss: 4.7671 -  
mean_absolute_error: 1.7091 - val_loss  
: 7.6005 - val_mean_absolute_error: 2.  
1883  
931 Epoch 442/10000  
932 - 14s - loss: 4.7669 -  
mean_absolute_error: 1.7089 - val_loss  
: 7.6008 - val_mean_absolute_error: 2.  
1917  
933 Epoch 443/10000  
934 - 14s - loss: 4.7613 -  
mean_absolute_error: 1.7097 - val_loss  
: 7.6066 - val_mean_absolute_error: 2.  
1873  
935 Epoch 444/10000  
936 - 14s - loss: 4.7648 -  
mean_absolute_error: 1.7087 - val_loss  
: 7.6016 - val_mean_absolute_error: 2.  
1898  
937 Epoch 445/10000  
938 - 14s - loss: 4.7624 -  
mean_absolute_error: 1.7064 - val_loss  
: 7.6094 - val_mean_absolute_error: 2.  
1973
```



```
939 Epoch 446/10000
940   - 14s - loss: 4.7664 -
      mean_absolute_error: 1.7105 - val_loss
      : 7.6009 - val_mean_absolute_error: 2.
      1914
941 Epoch 447/10000
942   - 14s - loss: 4.7644 -
      mean_absolute_error: 1.7094 - val_loss
      : 7.6021 - val_mean_absolute_error: 2.
      1882
943 Epoch 448/10000
944   - 14s - loss: 4.7618 -
      mean_absolute_error: 1.7090 - val_loss
      : 7.6083 - val_mean_absolute_error: 2.
      1861
945 Epoch 449/10000
946   - 14s - loss: 4.7632 -
      mean_absolute_error: 1.7080 - val_loss
      : 7.6001 - val_mean_absolute_error: 2.
      1903
947 Epoch 450/10000
948   - 14s - loss: 4.7630 -
      mean_absolute_error: 1.7083 - val_loss
      : 7.6023 - val_mean_absolute_error: 2.
```

```
948 1899
949 Epoch 451/10000
950   - 14s - loss: 4.7640 -
      mean_absolute_error: 1.7076 - val_loss
      : 7.6013 - val_mean_absolute_error: 2.
1928
951 Epoch 452/10000
952   - 14s - loss: 4.7637 -
      mean_absolute_error: 1.7092 - val_loss
      : 7.5997 - val_mean_absolute_error: 2.
1905
953 Epoch 453/10000
954   - 14s - loss: 4.7624 -
      mean_absolute_error: 1.7092 - val_loss
      : 7.6058 - val_mean_absolute_error: 2.
1886
955 Epoch 454/10000
956   - 14s - loss: 4.7630 -
      mean_absolute_error: 1.7082 - val_loss
      : 7.6061 - val_mean_absolute_error: 2.
1895
957 Epoch 455/10000
958   - 14s - loss: 4.7580 -
      mean_absolute_error: 1.7064 - val_loss
```

```
958 : 7.6025 - val_mean_absolute_error: 2.1892
959 Epoch 456/10000
960 - 14s - loss: 4.7596 -
mean_absolute_error: 1.7097 - val_loss
: 7.6086 - val_mean_absolute_error: 2.1860
961 Epoch 457/10000
962 - 14s - loss: 4.7589 -
mean_absolute_error: 1.7074 - val_loss
: 7.6027 - val_mean_absolute_error: 2.1925
963 Epoch 458/10000
964 - 14s - loss: 4.7620 -
mean_absolute_error: 1.7077 - val_loss
: 7.6064 - val_mean_absolute_error: 2.1937
965 Epoch 459/10000
966 - 14s - loss: 4.7610 -
mean_absolute_error: 1.7096 - val_loss
: 7.6071 - val_mean_absolute_error: 2.1910
967 Epoch 460/10000
968 - 14s - loss: 4.7575 -
```

```
968 mean_absolute_error: 1.7094 - val_loss
    : 7.6133 - val_mean_absolute_error: 2.
1865
969 Epoch 461/10000
970   - 14s - loss: 4.7595 -
    mean_absolute_error: 1.7052 - val_loss
    : 7.6045 - val_mean_absolute_error: 2.
1952
971 Epoch 462/10000
972   - 14s - loss: 4.7598 -
    mean_absolute_error: 1.7091 - val_loss
    : 7.6052 - val_mean_absolute_error: 2.
1929
973 Epoch 463/10000
974   - 14s - loss: 4.7560 -
    mean_absolute_error: 1.7093 - val_loss
    : 7.6074 - val_mean_absolute_error: 2.
1889
975 Epoch 464/10000
976   - 14s - loss: 4.7580 -
    mean_absolute_error: 1.7093 - val_loss
    : 7.6131 - val_mean_absolute_error: 2.
1860
977 Epoch 465/10000
```

```
978 - 14s - loss: 4.7603 -  
mean_absolute_error: 1.7069 - val_loss  
: 7.6079 - val_mean_absolute_error: 2.  
1913  
979 Epoch 466/10000  
980 - 14s - loss: 4.7564 -  
mean_absolute_error: 1.7070 - val_loss  
: 7.6102 - val_mean_absolute_error: 2.  
1931  
981 Epoch 467/10000  
982 - 14s - loss: 4.7559 -  
mean_absolute_error: 1.7079 - val_loss  
: 7.6122 - val_mean_absolute_error: 2.  
1896  
983 Epoch 468/10000  
984 - 14s - loss: 4.7550 -  
mean_absolute_error: 1.7047 - val_loss  
: 7.6100 - val_mean_absolute_error: 2.  
1948  
985 Epoch 469/10000  
986 - 14s - loss: 4.7495 -  
mean_absolute_error: 1.7089 - val_loss  
: 7.6165 - val_mean_absolute_error: 2.  
1876
```

```
987 Epoch 470/10000
988   - 14s - loss: 4.7557 -
mean_absolute_error: 1.7073 - val_loss
: 7.6122 - val_mean_absolute_error: 2.
1901
989 Epoch 471/10000
990   - 14s - loss: 4.7548 -
mean_absolute_error: 1.7065 - val_loss
: 7.6130 - val_mean_absolute_error: 2.
1893
991 Epoch 472/10000
992   - 14s - loss: 4.7509 -
mean_absolute_error: 1.7091 - val_loss
: 7.6143 - val_mean_absolute_error: 2.
1876
993 Epoch 473/10000
994   - 14s - loss: 4.7538 -
mean_absolute_error: 1.7051 - val_loss
: 7.6088 - val_mean_absolute_error: 2.
1921
995 Epoch 474/10000
996   - 14s - loss: 4.7506 -
mean_absolute_error: 1.7036 - val_loss
: 7.6070 - val_mean_absolute_error: 2.
```

```
996 1968
997 Epoch 475/10000
998   - 14s - loss: 4.7523 -
    mean_absolute_error: 1.7078 - val_loss
    : 7.6081 - val_mean_absolute_error: 2.
    1926
999 Epoch 476/10000
1000   - 14s - loss: 4.7542 -
    mean_absolute_error: 1.7065 - val_loss
    : 7.6081 - val_mean_absolute_error: 2.
    1943
1001 Epoch 477/10000
1002   - 14s - loss: 4.7532 -
    mean_absolute_error: 1.7073 - val_loss
    : 7.6105 - val_mean_absolute_error: 2.
    1924
1003 Epoch 478/10000
1004   - 14s - loss: 4.7534 -
    mean_absolute_error: 1.7064 - val_loss
    : 7.6144 - val_mean_absolute_error: 2.
    1942
1005 Epoch 479/10000
1006   - 14s - loss: 4.7493 -
    mean_absolute_error: 1.7071 - val_loss
```

```
1006 : 7.6142 - val_mean_absolute_error: 2.
1938
1007 Epoch 480/10000
1008 - 14s - loss: 4.7507 -
mean_absolute_error: 1.7063 - val_loss
: 7.6214 - val_mean_absolute_error: 2.
1900
1009 Epoch 481/10000
1010 - 14s - loss: 4.7515 -
mean_absolute_error: 1.7078 - val_loss
: 7.6329 - val_mean_absolute_error: 2.
1873
1011 Epoch 482/10000
1012 - 14s - loss: 4.7515 -
mean_absolute_error: 1.7046 - val_loss
: 7.6207 - val_mean_absolute_error: 2.
1899
1013 Epoch 483/10000
1014 - 14s - loss: 4.7501 -
mean_absolute_error: 1.7066 - val_loss
: 7.6127 - val_mean_absolute_error: 2.
1927
1015 Epoch 484/10000
1016 - 14s - loss: 4.7516 -
```



```
1016 mean_absolute_error: 1.7062 - val_loss
    : 7.6160 - val_mean_absolute_error: 2.
1935
1017 Epoch 485/10000
1018   - 14s - loss: 4.7487 -
    mean_absolute_error: 1.7062 - val_loss
    : 7.6161 - val_mean_absolute_error: 2.
1970
1019 Epoch 486/10000
1020   - 14s - loss: 4.7499 -
    mean_absolute_error: 1.7060 - val_loss
    : 7.6171 - val_mean_absolute_error: 2.
1970
1021 Epoch 487/10000
1022   - 14s - loss: 4.7494 -
    mean_absolute_error: 1.7070 - val_loss
    : 7.6162 - val_mean_absolute_error: 2.
1958
1023 Epoch 488/10000
1024   - 14s - loss: 4.7481 -
    mean_absolute_error: 1.7057 - val_loss
    : 7.6169 - val_mean_absolute_error: 2.
1927
1025 Epoch 489/10000
```

```
1026 - 14s - loss: 4.7484 -  
mean_absolute_error: 1.7061 - val_loss  
: 7.6148 - val_mean_absolute_error: 2.  
1934  
1027 Epoch 490/10000  
1028 - 14s - loss: 4.7472 -  
mean_absolute_error: 1.7066 - val_loss  
: 7.6119 - val_mean_absolute_error: 2.  
1946  
1029 Epoch 491/10000  
1030 - 14s - loss: 4.7486 -  
mean_absolute_error: 1.7054 - val_loss  
: 7.6156 - val_mean_absolute_error: 2.  
1949  
1031 Epoch 492/10000  
1032 - 14s - loss: 4.7471 -  
mean_absolute_error: 1.7068 - val_loss  
: 7.6151 - val_mean_absolute_error: 2.  
1904  
1033 Epoch 493/10000  
1034 - 14s - loss: 4.7475 -  
mean_absolute_error: 1.7040 - val_loss  
: 7.6219 - val_mean_absolute_error: 2.  
1985
```

```
1035 Epoch 494/10000
1036   - 14s - loss: 4.7490 -
      mean_absolute_error: 1.7080 - val_loss
      : 7.6185 - val_mean_absolute_error: 2.
      1959
1037
1038 Epoch 00494: ReduceLR0nPlateau
      reducing learning rate to 1.
      000000006569e-06.
1039 Epoch 495/10000
1040   - 14s - loss: 4.7394 -
      mean_absolute_error: 1.7065 - val_loss
      : 7.6180 - val_mean_absolute_error: 2.
      1952
1041 Epoch 496/10000
1042   - 14s - loss: 4.7387 -
      mean_absolute_error: 1.7067 - val_loss
      : 7.6177 - val_mean_absolute_error: 2.
      1943
1043 Epoch 497/10000
1044   - 14s - loss: 4.7386 -
      mean_absolute_error: 1.7055 - val_loss
      : 7.6178 - val_mean_absolute_error: 2.
      1940
```

```
1045 Epoch 498/10000
1046   - 14s - loss: 4.7385 -
      mean_absolute_error: 1.7045 - val_loss
      : 7.6179 - val_mean_absolute_error: 2.
      1940
1047 Epoch 499/10000
1048   - 14s - loss: 4.7385 -
      mean_absolute_error: 1.7047 - val_loss
      : 7.6183 - val_mean_absolute_error: 2.
      1939
1049 Epoch 500/10000
1050   - 14s - loss: 4.7385 -
      mean_absolute_error: 1.7050 - val_loss
      : 7.6183 - val_mean_absolute_error: 2.
      1940
1051 Epoch 501/10000
1052   - 14s - loss: 4.7383 -
      mean_absolute_error: 1.7050 - val_loss
      : 7.6183 - val_mean_absolute_error: 2.
      1937
1053 Epoch 502/10000
1054   - 14s - loss: 4.7382 -
      mean_absolute_error: 1.7038 - val_loss
      : 7.6183 - val_mean_absolute_error: 2.
```

```
1054 1939
1055 Epoch 503/10000
1056   - 14s - loss: 4.7384 -
      mean_absolute_error: 1.7048 - val_loss
      : 7.6182 - val_mean_absolute_error: 2.
      1935
1057 Epoch 504/10000
1058   - 14s - loss: 4.7382 -
      mean_absolute_error: 1.7036 - val_loss
      : 7.6182 - val_mean_absolute_error: 2.
      1937
1059 Epoch 505/10000
1060   - 14s - loss: 4.7383 -
      mean_absolute_error: 1.7049 - val_loss
      : 7.6180 - val_mean_absolute_error: 2.
      1938
1061 Epoch 506/10000
1062   - 14s - loss: 4.7383 -
      mean_absolute_error: 1.7047 - val_loss
      : 7.6182 - val_mean_absolute_error: 2.
      1936
1063 Epoch 507/10000
1064   - 14s - loss: 4.7381 -
      mean_absolute_error: 1.7049 - val_loss
```

```
1064 : 7.6183 - val_mean_absolute_error: 2.
1936
1065 Epoch 508/10000
1066 - 14s - loss: 4.7381 -
mean_absolute_error: 1.7043 - val_loss
: 7.6182 - val_mean_absolute_error: 2.
1935
1067 Epoch 509/10000
1068 - 14s - loss: 4.7377 -
mean_absolute_error: 1.7040 - val_loss
: 7.6180 - val_mean_absolute_error: 2.
1939
1069 Epoch 510/10000
1070 - 14s - loss: 4.7380 -
mean_absolute_error: 1.7049 - val_loss
: 7.6179 - val_mean_absolute_error: 2.
1937
1071 Epoch 511/10000
1072 - 14s - loss: 4.7378 -
mean_absolute_error: 1.7049 - val_loss
: 7.6179 - val_mean_absolute_error: 2.
1933
1073 Epoch 512/10000
1074 - 14s - loss: 4.7380 -
```

```
1074 mean_absolute_error: 1.7037 - val_loss
    : 7.6179 - val_mean_absolute_error: 2.
1935
1075 Epoch 513/10000
1076   - 14s - loss: 4.7380 -
    mean_absolute_error: 1.7044 - val_loss
    : 7.6181 - val_mean_absolute_error: 2.
1938
1077 Epoch 514/10000
1078   - 14s - loss: 4.7379 -
    mean_absolute_error: 1.7047 - val_loss
    : 7.6182 - val_mean_absolute_error: 2.
1937
1079 Epoch 515/10000
1080   - 14s - loss: 4.7378 -
    mean_absolute_error: 1.7040 - val_loss
    : 7.6180 - val_mean_absolute_error: 2.
1938
1081 Epoch 516/10000
1082   - 14s - loss: 4.7376 -
    mean_absolute_error: 1.7049 - val_loss
    : 7.6179 - val_mean_absolute_error: 2.
1935
1083 Epoch 517/10000
```

```
1084 - 14s - loss: 4.7378 -  
mean_absolute_error: 1.7046 - val_loss  
: 7.6180 - val_mean_absolute_error: 2.  
1935  
1085 Epoch 518/10000  
1086 - 14s - loss: 4.7378 -  
mean_absolute_error: 1.7044 - val_loss  
: 7.6180 - val_mean_absolute_error: 2.  
1935  
1087 Epoch 519/10000  
1088 - 14s - loss: 4.7377 -  
mean_absolute_error: 1.7045 - val_loss  
: 7.6180 - val_mean_absolute_error: 2.  
1935  
1089 Epoch 520/10000  
1090 - 14s - loss: 4.7377 -  
mean_absolute_error: 1.7045 - val_loss  
: 7.6181 - val_mean_absolute_error: 2.  
1937  
1091 Epoch 521/10000  
1092 - 14s - loss: 4.7377 -  
mean_absolute_error: 1.7042 - val_loss  
: 7.6182 - val_mean_absolute_error: 2.  
1937
```



```
1093 Epoch 522/10000
1094   - 14s - loss: 4.7375 -
      mean_absolute_error: 1.7044 - val_loss
      : 7.6183 - val_mean_absolute_error: 2.
      1938
1095 Epoch 523/10000
1096   - 14s - loss: 4.7377 -
      mean_absolute_error: 1.7039 - val_loss
      : 7.6186 - val_mean_absolute_error: 2.
      1936
1097 Epoch 524/10000
1098   - 14s - loss: 4.7375 -
      mean_absolute_error: 1.7042 - val_loss
      : 7.6187 - val_mean_absolute_error: 2.
      1936
1099 Epoch 525/10000
1100   - 14s - loss: 4.7373 -
      mean_absolute_error: 1.7047 - val_loss
      : 7.6187 - val_mean_absolute_error: 2.
      1933
1101 Epoch 526/10000
1102   - 14s - loss: 4.7377 -
      mean_absolute_error: 1.7037 - val_loss
      : 7.6188 - val_mean_absolute_error: 2.
```

```
1102 1932
1103 Epoch 527/10000
1104 - 14s - loss: 4.7374 -
      mean_absolute_error: 1.7042 - val_loss
      : 7.6189 - val_mean_absolute_error: 2.
1931
1105 Epoch 528/10000
1106 - 14s - loss: 4.7375 -
      mean_absolute_error: 1.7040 - val_loss
      : 7.6184 - val_mean_absolute_error: 2.
1930
1107 Epoch 529/10000
1108 - 14s - loss: 4.7372 -
      mean_absolute_error: 1.7032 - val_loss
      : 7.6182 - val_mean_absolute_error: 2.
1935
1109 Epoch 530/10000
1110 - 14s - loss: 4.7373 -
      mean_absolute_error: 1.7045 - val_loss
      : 7.6184 - val_mean_absolute_error: 2.
1934
1111 Epoch 531/10000
1112 - 14s - loss: 4.7373 -
      mean_absolute_error: 1.7043 - val_loss
```

```
1112 : 7.6186 - val_mean_absolute_error: 2.
1933
1113 Epoch 532/10000
1114 - 14s - loss: 4.7370 -
mean_absolute_error: 1.7044 - val_loss
: 7.6187 - val_mean_absolute_error: 2.
1930
1115 Epoch 533/10000
1116 - 14s - loss: 4.7372 -
mean_absolute_error: 1.7035 - val_loss
: 7.6186 - val_mean_absolute_error: 2.
1934
1117 Epoch 534/10000
1118 - 14s - loss: 4.7371 -
mean_absolute_error: 1.7044 - val_loss
: 7.6185 - val_mean_absolute_error: 2.
1932
1119 Epoch 535/10000
1120 - 14s - loss: 4.7372 -
mean_absolute_error: 1.7037 - val_loss
: 7.6186 - val_mean_absolute_error: 2.
1933
1121 Epoch 536/10000
1122 - 14s - loss: 4.7371 -
```

```
1122 mean_absolute_error: 1.7033 - val_loss
    : 7.6187 - val_mean_absolute_error: 2.
1937
1123 Epoch 537/10000
1124   - 14s - loss: 4.7370 -
    mean_absolute_error: 1.7044 - val_loss
    : 7.6186 - val_mean_absolute_error: 2.
1935
1125 Epoch 538/10000
1126   - 14s - loss: 4.7370 -
    mean_absolute_error: 1.7045 - val_loss
    : 7.6186 - val_mean_absolute_error: 2.
1934
1127 Epoch 539/10000
1128   - 14s - loss: 4.7369 -
    mean_absolute_error: 1.7041 - val_loss
    : 7.6188 - val_mean_absolute_error: 2.
1933
1129 Epoch 540/10000
1130   - 14s - loss: 4.7369 -
    mean_absolute_error: 1.7042 - val_loss
    : 7.6189 - val_mean_absolute_error: 2.
1932
1131 Epoch 541/10000
```

```
1132 - 14s - loss: 4.7369 -  
mean_absolute_error: 1.7041 - val_loss  
: 7.6189 - val_mean_absolute_error: 2.  
1932  
1133 Epoch 542/10000  
1134 - 14s - loss: 4.7369 -  
mean_absolute_error: 1.7042 - val_loss  
: 7.6190 - val_mean_absolute_error: 2.  
1935  
1135 Epoch 543/10000  
1136 - 14s - loss: 4.7368 -  
mean_absolute_error: 1.7037 - val_loss  
: 7.6188 - val_mean_absolute_error: 2.  
1936  
1137 Epoch 544/10000  
1138 - 14s - loss: 4.7366 -  
mean_absolute_error: 1.7039 - val_loss  
: 7.6191 - val_mean_absolute_error: 2.  
1941  
1139 Epoch 545/10000  
1140 - 14s - loss: 4.7368 -  
mean_absolute_error: 1.7045 - val_loss  
: 7.6189 - val_mean_absolute_error: 2.  
1939
```

```
1141 Epoch 546/10000
1142   - 14s - loss: 4.7366 -
      mean_absolute_error: 1.7045 - val_loss
      : 7.6188 - val_mean_absolute_error: 2.
      1935
1143 Epoch 547/10000
1144   - 14s - loss: 4.7365 -
      mean_absolute_error: 1.7037 - val_loss
      : 7.6185 - val_mean_absolute_error: 2.
      1939
1145 Epoch 548/10000
1146   - 14s - loss: 4.7367 -
      mean_absolute_error: 1.7043 - val_loss
      : 7.6186 - val_mean_absolute_error: 2.
      1940
1147 Epoch 549/10000
1148   - 14s - loss: 4.7367 -
      mean_absolute_error: 1.7041 - val_loss
      : 7.6190 - val_mean_absolute_error: 2.
      1939
1149 Epoch 550/10000
1150   - 14s - loss: 4.7365 -
      mean_absolute_error: 1.7044 - val_loss
      : 7.6193 - val_mean_absolute_error: 2.
```

```
1150 1935
1151 Epoch 551/10000
1152   - 14s - loss: 4.7366 -
      mean_absolute_error: 1.7041 - val_loss
      : 7.6187 - val_mean_absolute_error: 2.
1935
1153 Epoch 552/10000
1154   - 14s - loss: 4.7365 -
      mean_absolute_error: 1.7033 - val_loss
      : 7.6188 - val_mean_absolute_error: 2.
1939
1155 Epoch 553/10000
1156   - 14s - loss: 4.7364 -
      mean_absolute_error: 1.7043 - val_loss
      : 7.6190 - val_mean_absolute_error: 2.
1938
1157 Epoch 554/10000
1158   - 14s - loss: 4.7364 -
      mean_absolute_error: 1.7040 - val_loss
      : 7.6191 - val_mean_absolute_error: 2.
1938
1159 Epoch 555/10000
1160   - 13s - loss: 4.7364 -
      mean_absolute_error: 1.7043 - val_loss
```

```
1160 : 7.6191 - val_mean_absolute_error: 2.
1937
1161 Epoch 556/10000
1162 - 14s - loss: 4.7364 -
mean_absolute_error: 1.7037 - val_loss
: 7.6192 - val_mean_absolute_error: 2.
1938
1163 Epoch 557/10000
1164 - 14s - loss: 4.7362 -
mean_absolute_error: 1.7038 - val_loss
: 7.6194 - val_mean_absolute_error: 2.
1939
1165 Epoch 558/10000
1166 - 14s - loss: 4.7361 -
mean_absolute_error: 1.7046 - val_loss
: 7.6198 - val_mean_absolute_error: 2.
1936
1167 Epoch 559/10000
1168 - 14s - loss: 4.7362 -
mean_absolute_error: 1.7046 - val_loss
: 7.6197 - val_mean_absolute_error: 2.
1935
1169 Epoch 560/10000
1170 - 14s - loss: 4.7362 -
```



```
1170 mean_absolute_error: 1.7037 - val_loss
    : 7.6200 - val_mean_absolute_error: 2.
1935
1171 Epoch 561/10000
1172   - 14s - loss: 4.7361 -
    mean_absolute_error: 1.7041 - val_loss
    : 7.6200 - val_mean_absolute_error: 2.
1934
1173 Epoch 562/10000
1174   - 14s - loss: 4.7361 -
    mean_absolute_error: 1.7034 - val_loss
    : 7.6199 - val_mean_absolute_error: 2.
1937
1175 Epoch 563/10000
1176   - 14s - loss: 4.7361 -
    mean_absolute_error: 1.7040 - val_loss
    : 7.6201 - val_mean_absolute_error: 2.
1939
1177 Epoch 564/10000
1178   - 13s - loss: 4.7361 -
    mean_absolute_error: 1.7037 - val_loss
    : 7.6202 - val_mean_absolute_error: 2.
1940
1179 Epoch 565/10000
```

```
1180 - 14s - loss: 4.7360 -  
mean_absolute_error: 1.7040 - val_loss  
: 7.6203 - val_mean_absolute_error: 2.  
1940  
1181 Epoch 566/10000  
1182 - 14s - loss: 4.7359 -  
mean_absolute_error: 1.7039 - val_loss  
: 7.6203 - val_mean_absolute_error: 2.  
1942  
1183 Epoch 567/10000  
1184 - 14s - loss: 4.7360 -  
mean_absolute_error: 1.7042 - val_loss  
: 7.6203 - val_mean_absolute_error: 2.  
1939  
1185 Epoch 568/10000  
1186 - 14s - loss: 4.7359 -  
mean_absolute_error: 1.7042 - val_loss  
: 7.6204 - val_mean_absolute_error: 2.  
1937  
1187 Epoch 569/10000  
1188 - 14s - loss: 4.7357 -  
mean_absolute_error: 1.7038 - val_loss  
: 7.6206 - val_mean_absolute_error: 2.  
1940
```

```
1189 Epoch 570/10000
1190   - 14s - loss: 4.7359 -
      mean_absolute_error: 1.7039 - val_loss
      : 7.6203 - val_mean_absolute_error: 2.
      1939
1191 Epoch 571/10000
1192   - 14s - loss: 4.7357 -
      mean_absolute_error: 1.7041 - val_loss
      : 7.6205 - val_mean_absolute_error: 2.
      1937
1193 Epoch 572/10000
1194   - 14s - loss: 4.7360 -
      mean_absolute_error: 1.7044 - val_loss
      : 7.6206 - val_mean_absolute_error: 2.
      1937
1195 Epoch 573/10000
1196   - 14s - loss: 4.7358 -
      mean_absolute_error: 1.7037 - val_loss
      : 7.6204 - val_mean_absolute_error: 2.
      1940
1197 Epoch 574/10000
1198   - 14s - loss: 4.7356 -
      mean_absolute_error: 1.7042 - val_loss
      : 7.6203 - val_mean_absolute_error: 2.
```

```
1198 1940
1199 Epoch 575/10000
1200   - 14s - loss: 4.7355 -
      mean_absolute_error: 1.7036 - val_loss
      : 7.6199 - val_mean_absolute_error: 2.
1942
1201 Epoch 576/10000
1202   - 13s - loss: 4.7355 -
      mean_absolute_error: 1.7039 - val_loss
      : 7.6202 - val_mean_absolute_error: 2.
1944
1203 Epoch 577/10000
1204   - 14s - loss: 4.7355 -
      mean_absolute_error: 1.7045 - val_loss
      : 7.6201 - val_mean_absolute_error: 2.
1941
1205 Epoch 578/10000
1206   - 14s - loss: 4.7356 -
      mean_absolute_error: 1.7047 - val_loss
      : 7.6203 - val_mean_absolute_error: 2.
1941
1207 Epoch 579/10000
1208   - 14s - loss: 4.7355 -
      mean_absolute_error: 1.7041 - val_loss
```

```
1208 : 7.6203 - val_mean_absolute_error: 2.  
1941  
1209 Epoch 580/10000  
1210 - 14s - loss: 4.7355 -  
mean_absolute_error: 1.7037 - val_loss  
: 7.6204 - val_mean_absolute_error: 2.  
1942  
1211 Epoch 581/10000  
1212 - 14s - loss: 4.7353 -  
mean_absolute_error: 1.7044 - val_loss  
: 7.6206 - val_mean_absolute_error: 2.  
1940  
1213 Epoch 582/10000  
1214 - 14s - loss: 4.7352 -  
mean_absolute_error: 1.7044 - val_loss  
: 7.6209 - val_mean_absolute_error: 2.  
1938  
1215 Epoch 583/10000  
1216 - 14s - loss: 4.7354 -  
mean_absolute_error: 1.7036 - val_loss  
: 7.6211 - val_mean_absolute_error: 2.  
1938  
1217 Epoch 584/10000  
1218 - 14s - loss: 4.7352 -
```

```
1218 mean_absolute_error: 1.7040 - val_loss
    : 7.6212 - val_mean_absolute_error: 2.
1940
1219 Epoch 585/10000
1220   - 14s - loss: 4.7351 -
    mean_absolute_error: 1.7040 - val_loss
    : 7.6209 - val_mean_absolute_error: 2.
1938
1221 Epoch 586/10000
1222   - 14s - loss: 4.7353 -
    mean_absolute_error: 1.7035 - val_loss
    : 7.6207 - val_mean_absolute_error: 2.
1938
1223 Epoch 587/10000
1224   - 14s - loss: 4.7353 -
    mean_absolute_error: 1.7036 - val_loss
    : 7.6206 - val_mean_absolute_error: 2.
1939
1225 Epoch 588/10000
1226   - 14s - loss: 4.7352 -
    mean_absolute_error: 1.7037 - val_loss
    : 7.6207 - val_mean_absolute_error: 2.
1939
1227 Epoch 589/10000
```

```
1228 - 14s - loss: 4.7350 -  
mean_absolute_error: 1.7035 - val_loss  
: 7.6209 - val_mean_absolute_error: 2.  
1943  
1229 Epoch 590/10000  
1230 - 14s - loss: 4.7351 -  
mean_absolute_error: 1.7038 - val_loss  
: 7.6210 - val_mean_absolute_error: 2.  
1943  
1231 Epoch 591/10000  
1232 - 14s - loss: 4.7347 -  
mean_absolute_error: 1.7033 - val_loss  
: 7.6209 - val_mean_absolute_error: 2.  
1946  
1233 Epoch 592/10000  
1234 - 14s - loss: 4.7352 -  
mean_absolute_error: 1.7047 - val_loss  
: 7.6208 - val_mean_absolute_error: 2.  
1944  
1235 Epoch 593/10000  
1236 - 14s - loss: 4.7350 -  
mean_absolute_error: 1.7046 - val_loss  
: 7.6209 - val_mean_absolute_error: 2.  
1940
```

```
1237 Epoch 594/10000
1238   - 14s - loss: 4.7349 -
      mean_absolute_error: 1.7039 - val_loss
      : 7.6209 - val_mean_absolute_error: 2.
1938
1239
1240 Epoch 00594: ReduceLR0nPlateau
      reducing learning rate to 1e-06.
1241 Epoch 595/10000
1242   - 14s - loss: 4.7349 -
      mean_absolute_error: 1.7036 - val_loss
      : 7.6213 - val_mean_absolute_error: 2.
1937
1243 Epoch 596/10000
1244   - 14s - loss: 4.7350 -
      mean_absolute_error: 1.7039 - val_loss
      : 7.6209 - val_mean_absolute_error: 2.
1936
1245 Epoch 597/10000
1246   - 14s - loss: 4.7348 -
      mean_absolute_error: 1.7040 - val_loss
      : 7.6209 - val_mean_absolute_error: 2.
1935
1247 Epoch 598/10000
```



```
1248 - 14s - loss: 4.7349 -  
mean_absolute_error: 1.7029 - val_loss  
: 7.6207 - val_mean_absolute_error: 2.  
1939  
1249 Epoch 599/10000  
1250 - 14s - loss: 4.7349 -  
mean_absolute_error: 1.7037 - val_loss  
: 7.6211 - val_mean_absolute_error: 2.  
1941  
1251 Epoch 600/10000  
1252 - 14s - loss: 4.7348 -  
mean_absolute_error: 1.7042 - val_loss  
: 7.6209 - val_mean_absolute_error: 2.  
1943  
1253 Epoch 601/10000  
1254 - 14s - loss: 4.7347 -  
mean_absolute_error: 1.7042 - val_loss  
: 7.6207 - val_mean_absolute_error: 2.  
1941  
1255 Epoch 602/10000  
1256 - 14s - loss: 4.7348 -  
mean_absolute_error: 1.7034 - val_loss  
: 7.6209 - val_mean_absolute_error: 2.  
1943
```

```
1257 Epoch 603/10000
1258   - 14s - loss: 4.7346 -
      mean_absolute_error: 1.7043 - val_loss
      : 7.6209 - val_mean_absolute_error: 2.
      1941
1259 Epoch 604/10000
1260   - 14s - loss: 4.7348 -
      mean_absolute_error: 1.7039 - val_loss
      : 7.6210 - val_mean_absolute_error: 2.
      1940
1261 Epoch 605/10000
1262   - 14s - loss: 4.7346 -
      mean_absolute_error: 1.7042 - val_loss
      : 7.6212 - val_mean_absolute_error: 2.
      1939
1263 Epoch 606/10000
1264   - 14s - loss: 4.7346 -
      mean_absolute_error: 1.7039 - val_loss
      : 7.6209 - val_mean_absolute_error: 2.
      1941
1265 Epoch 607/10000
1266   - 14s - loss: 4.7346 -
      mean_absolute_error: 1.7037 - val_loss
      : 7.6210 - val_mean_absolute_error: 2.
```

```
1266 1939
1267 Epoch 608/10000
1268   - 14s - loss: 4.7345 -
      mean_absolute_error: 1.7035 - val_loss
      : 7.6213 - val_mean_absolute_error: 2.
1941
1269 Epoch 609/10000
1270   - 14s - loss: 4.7344 -
      mean_absolute_error: 1.7038 - val_loss
      : 7.6214 - val_mean_absolute_error: 2.
1939
1271 Epoch 610/10000
1272   - 14s - loss: 4.7345 -
      mean_absolute_error: 1.7034 - val_loss
      : 7.6214 - val_mean_absolute_error: 2.
1940
1273 Epoch 611/10000
1274   - 14s - loss: 4.7343 -
      mean_absolute_error: 1.7041 - val_loss
      : 7.6215 - val_mean_absolute_error: 2.
1937
1275 Epoch 612/10000
1276   - 14s - loss: 4.7345 -
      mean_absolute_error: 1.7034 - val_loss
```

```
1276 : 7.6216 - val_mean_absolute_error: 2.
1938
1277 Epoch 613/10000
1278 - 14s - loss: 4.7343 -
mean_absolute_error: 1.7034 - val_loss
: 7.6213 - val_mean_absolute_error: 2.
1940
1279 Epoch 614/10000
1280 - 14s - loss: 4.7341 -
mean_absolute_error: 1.7043 - val_loss
: 7.6211 - val_mean_absolute_error: 2.
1935
1281 Epoch 615/10000
1282 - 14s - loss: 4.7343 -
mean_absolute_error: 1.7030 - val_loss
: 7.6211 - val_mean_absolute_error: 2.
1938
1283 Epoch 616/10000
1284 - 14s - loss: 4.7339 -
mean_absolute_error: 1.7025 - val_loss
: 7.6209 - val_mean_absolute_error: 2.
1944
1285 Epoch 617/10000
1286 - 14s - loss: 4.7342 -
```

```
1286 mean_absolute_error: 1.7036 - val_loss
    : 7.6210 - val_mean_absolute_error: 2.
1942
1287 Epoch 618/10000
1288   - 14s - loss: 4.7342 -
    mean_absolute_error: 1.7038 - val_loss
    : 7.6211 - val_mean_absolute_error: 2.
1942
1289 Epoch 619/10000
1290   - 14s - loss: 4.7341 -
    mean_absolute_error: 1.7038 - val_loss
    : 7.6213 - val_mean_absolute_error: 2.
1939
1291 Epoch 620/10000
1292   - 14s - loss: 4.7339 -
    mean_absolute_error: 1.7040 - val_loss
    : 7.6216 - val_mean_absolute_error: 2.
1938
1293 Epoch 621/10000
1294   - 13s - loss: 4.7337 -
    mean_absolute_error: 1.7037 - val_loss
    : 7.6217 - val_mean_absolute_error: 2.
1934
1295 Epoch 622/10000
```

```
1296 - 14s - loss: 4.7341 -  
mean_absolute_error: 1.7027 - val_loss  
: 7.6218 - val_mean_absolute_error: 2.  
1938  
1297 Epoch 623/10000  
1298 - 14s - loss: 4.7339 -  
mean_absolute_error: 1.7032 - val_loss  
: 7.6217 - val_mean_absolute_error: 2.  
1937  
1299 Epoch 624/10000  
1300 - 14s - loss: 4.7339 -  
mean_absolute_error: 1.7033 - val_loss  
: 7.6215 - val_mean_absolute_error: 2.  
1939  
1301 Epoch 625/10000  
1302 - 14s - loss: 4.7338 -  
mean_absolute_error: 1.7031 - val_loss  
: 7.6217 - val_mean_absolute_error: 2.  
1941  
1303 Epoch 626/10000  
1304 - 14s - loss: 4.7338 -  
mean_absolute_error: 1.7037 - val_loss  
: 7.6218 - val_mean_absolute_error: 2.  
1940
```

```
1305 Epoch 627/10000
1306   - 14s - loss: 4.7338 -
      mean_absolute_error: 1.7035 - val_loss
      : 7.6222 - val_mean_absolute_error: 2.
1941
1307 Epoch 628/10000
1308   - 14s - loss: 4.7337 -
      mean_absolute_error: 1.7037 - val_loss
      : 7.6224 - val_mean_absolute_error: 2.
1942
1309 Epoch 629/10000
1310   - 14s - loss: 4.7337 -
      mean_absolute_error: 1.7038 - val_loss
      : 7.6221 - val_mean_absolute_error: 2.
1939
1311 Epoch 630/10000
1312   - 14s - loss: 4.7337 -
      mean_absolute_error: 1.7032 - val_loss
      : 7.6221 - val_mean_absolute_error: 2.
1939
1313 Epoch 631/10000
1314   - 14s - loss: 4.7337 -
      mean_absolute_error: 1.7033 - val_loss
      : 7.6221 - val_mean_absolute_error: 2.
```

```
1314 1939
1315 Epoch 632/10000
1316   - 14s - loss: 4.7336 -
      mean_absolute_error: 1.7036 - val_loss
      : 7.6220 - val_mean_absolute_error: 2.
1939
1317 Epoch 633/10000
1318   - 14s - loss: 4.7335 -
      mean_absolute_error: 1.7035 - val_loss
      : 7.6220 - val_mean_absolute_error: 2.
1942
1319 Epoch 634/10000
1320   - 14s - loss: 4.7336 -
      mean_absolute_error: 1.7036 - val_loss
      : 7.6222 - val_mean_absolute_error: 2.
1943
1321 Epoch 635/10000
1322   - 14s - loss: 4.7335 -
      mean_absolute_error: 1.7040 - val_loss
      : 7.6222 - val_mean_absolute_error: 2.
1943
1323 Epoch 636/10000
1324   - 14s - loss: 4.7335 -
      mean_absolute_error: 1.7038 - val_loss
```



```
1324 : 7.6224 - val_mean_absolute_error: 2.
1943
1325 Epoch 637/10000
1326 - 14s - loss: 4.7334 -
mean_absolute_error: 1.7039 - val_loss
: 7.6225 - val_mean_absolute_error: 2.
1942
1327 Epoch 638/10000
1328 - 14s - loss: 4.7334 -
mean_absolute_error: 1.7036 - val_loss
: 7.6224 - val_mean_absolute_error: 2.
1939
1329 Epoch 639/10000
1330 - 14s - loss: 4.7334 -
mean_absolute_error: 1.7033 - val_loss
: 7.6220 - val_mean_absolute_error: 2.
1938
1331 Epoch 640/10000
1332 - 14s - loss: 4.7332 -
mean_absolute_error: 1.7038 - val_loss
: 7.6225 - val_mean_absolute_error: 2.
1937
1333 Epoch 641/10000
1334 - 14s - loss: 4.7331 -
```

```
1334 mean_absolute_error: 1.7032 - val_loss
    : 7.6223 - val_mean_absolute_error: 2.
1941
1335 Epoch 642/10000
1336   - 14s - loss: 4.7333 -
    mean_absolute_error: 1.7034 - val_loss
    : 7.6223 - val_mean_absolute_error: 2.
1941
1337 Epoch 643/10000
1338   - 14s - loss: 4.7332 -
    mean_absolute_error: 1.7032 - val_loss
    : 7.6222 - val_mean_absolute_error: 2.
1943
1339 Epoch 644/10000
1340   - 14s - loss: 4.7332 -
    mean_absolute_error: 1.7032 - val_loss
    : 7.6224 - val_mean_absolute_error: 2.
1943
1341 Epoch 645/10000
1342   - 14s - loss: 4.7331 -
    mean_absolute_error: 1.7035 - val_loss
    : 7.6224 - val_mean_absolute_error: 2.
1941
1343 Epoch 646/10000
```

```
1344 - 14s - loss: 4.7331 -  
mean_absolute_error: 1.7036 - val_loss  
: 7.6223 - val_mean_absolute_error: 2.  
1942  
1345 Epoch 647/10000  
1346 - 14s - loss: 4.7330 -  
mean_absolute_error: 1.7031 - val_loss  
: 7.6224 - val_mean_absolute_error: 2.  
1946  
1347 Epoch 648/10000  
1348 - 14s - loss: 4.7331 -  
mean_absolute_error: 1.7036 - val_loss  
: 7.6226 - val_mean_absolute_error: 2.  
1944  
1349 Epoch 649/10000  
1350 - 14s - loss: 4.7330 -  
mean_absolute_error: 1.7038 - val_loss  
: 7.6225 - val_mean_absolute_error: 2.  
1944  
1351 Epoch 650/10000  
1352 - 14s - loss: 4.7329 -  
mean_absolute_error: 1.7041 - val_loss  
: 7.6230 - val_mean_absolute_error: 2.  
1942
```

```
1353 Epoch 651/10000
1354   - 14s - loss: 4.7328 -
      mean_absolute_error: 1.7036 - val_loss
      : 7.6232 - val_mean_absolute_error: 2.
      1941
1355 Epoch 652/10000
1356   - 14s - loss: 4.7327 -
      mean_absolute_error: 1.7029 - val_loss
      : 7.6229 - val_mean_absolute_error: 2.
      1945
1357 Epoch 653/10000
1358   - 14s - loss: 4.7329 -
      mean_absolute_error: 1.7034 - val_loss
      : 7.6231 - val_mean_absolute_error: 2.
      1944
1359 Epoch 654/10000
1360   - 14s - loss: 4.7327 -
      mean_absolute_error: 1.7035 - val_loss
      : 7.6229 - val_mean_absolute_error: 2.
      1945
1361 Epoch 655/10000
1362   - 14s - loss: 4.7327 -
      mean_absolute_error: 1.7033 - val_loss
      : 7.6230 - val_mean_absolute_error: 2.
```

```
1362 1945
1363 Epoch 656/10000
1364   - 14s - loss: 4.7328 -
      mean_absolute_error: 1.7034 - val_loss
      : 7.6229 - val_mean_absolute_error: 2.
1944
1365 Epoch 657/10000
1366   - 14s - loss: 4.7327 -
      mean_absolute_error: 1.7040 - val_loss
      : 7.6232 - val_mean_absolute_error: 2.
1939
1367 Epoch 658/10000
1368   - 14s - loss: 4.7326 -
      mean_absolute_error: 1.7033 - val_loss
      : 7.6232 - val_mean_absolute_error: 2.
1937
1369 Epoch 659/10000
1370   - 14s - loss: 4.7326 -
      mean_absolute_error: 1.7024 - val_loss
      : 7.6231 - val_mean_absolute_error: 2.
1941
1371 Epoch 660/10000
1372   - 14s - loss: 4.7327 -
      mean_absolute_error: 1.7032 - val_loss
```

```
1372 : 7.6232 - val_mean_absolute_error: 2.
1942
1373 Epoch 661/10000
1374 - 14s - loss: 4.7324 -
mean_absolute_error: 1.7035 - val_loss
: 7.6234 - val_mean_absolute_error: 2.
1942
1375 Epoch 662/10000
1376 - 14s - loss: 4.7325 -
mean_absolute_error: 1.7036 - val_loss
: 7.6232 - val_mean_absolute_error: 2.
1941
1377 Epoch 663/10000
1378 - 14s - loss: 4.7324 -
mean_absolute_error: 1.7038 - val_loss
: 7.6229 - val_mean_absolute_error: 2.
1940
1379 Epoch 664/10000
1380 - 14s - loss: 4.7326 -
mean_absolute_error: 1.7029 - val_loss
: 7.6231 - val_mean_absolute_error: 2.
1942
1381 Epoch 665/10000
1382 - 14s - loss: 4.7325 -
```

```
1382 mean_absolute_error: 1.7031 - val_loss
    : 7.6232 - val_mean_absolute_error: 2.
1940
1383 Epoch 666/10000
1384   - 14s - loss: 4.7324 -
    mean_absolute_error: 1.7033 - val_loss
    : 7.6232 - val_mean_absolute_error: 2.
1943
1385 Epoch 667/10000
1386   - 14s - loss: 4.7324 -
    mean_absolute_error: 1.7037 - val_loss
    : 7.6229 - val_mean_absolute_error: 2.
1940
1387 Epoch 668/10000
1388   - 14s - loss: 4.7324 -
    mean_absolute_error: 1.7024 - val_loss
    : 7.6230 - val_mean_absolute_error: 2.
1941
1389 Epoch 669/10000
1390   - 14s - loss: 4.7323 -
    mean_absolute_error: 1.7035 - val_loss
    : 7.6229 - val_mean_absolute_error: 2.
1941
1391 Epoch 670/10000
```

```
1392 - 14s - loss: 4.7323 -  
mean_absolute_error: 1.7032 - val_loss  
: 7.6229 - val_mean_absolute_error: 2.  
1944  
1393 Epoch 671/10000  
1394 - 14s - loss: 4.7322 -  
mean_absolute_error: 1.7034 - val_loss  
: 7.6229 - val_mean_absolute_error: 2.  
1943  
1395 Epoch 672/10000  
1396 - 14s - loss: 4.7321 -  
mean_absolute_error: 1.7031 - val_loss  
: 7.6230 - val_mean_absolute_error: 2.  
1943  
1397 Epoch 673/10000  
1398 - 14s - loss: 4.7322 -  
mean_absolute_error: 1.7034 - val_loss  
: 7.6230 - val_mean_absolute_error: 2.  
1942  
1399 Epoch 674/10000  
1400 - 14s - loss: 4.7321 -  
mean_absolute_error: 1.7037 - val_loss  
: 7.6230 - val_mean_absolute_error: 2.  
1941
```



```
1401 Epoch 675/10000
1402   - 14s - loss: 4.7318 -
      mean_absolute_error: 1.7039 - val_loss
      : 7.6232 - val_mean_absolute_error: 2.
      1938
1403 Epoch 676/10000
1404   - 14s - loss: 4.7321 -
      mean_absolute_error: 1.7031 - val_loss
      : 7.6234 - val_mean_absolute_error: 2.
      1939
1405 Epoch 677/10000
1406   - 14s - loss: 4.7320 -
      mean_absolute_error: 1.7031 - val_loss
      : 7.6231 - val_mean_absolute_error: 2.
      1939
1407 Epoch 678/10000
1408   - 14s - loss: 4.7320 -
      mean_absolute_error: 1.7017 - val_loss
      : 7.6230 - val_mean_absolute_error: 2.
      1945
1409 Epoch 679/10000
1410   - 14s - loss: 4.7320 -
      mean_absolute_error: 1.7030 - val_loss
      : 7.6230 - val_mean_absolute_error: 2.
```

```
1410 1943
1411 Epoch 680/10000
1412   - 14s - loss: 4.7319 -
      mean_absolute_error: 1.7034 - val_loss
      : 7.6231 - val_mean_absolute_error: 2.
1413 1941
1413 Epoch 681/10000
1414   - 14s - loss: 4.7320 -
      mean_absolute_error: 1.7028 - val_loss
      : 7.6233 - val_mean_absolute_error: 2.
1415 1942
1415 Epoch 682/10000
1416   - 14s - loss: 4.7319 -
      mean_absolute_error: 1.7038 - val_loss
      : 7.6232 - val_mean_absolute_error: 2.
1417 1943
1417 Epoch 683/10000
1418   - 14s - loss: 4.7318 -
      mean_absolute_error: 1.7031 - val_loss
      : 7.6233 - val_mean_absolute_error: 2.
1419 1945
1419 Epoch 684/10000
1420   - 14s - loss: 4.7317 -
      mean_absolute_error: 1.7032 - val_loss
```

```
1420 : 7.6234 - val_mean_absolute_error: 2.
1944
1421 Epoch 685/10000
1422 - 14s - loss: 4.7317 -
mean_absolute_error: 1.7042 - val_loss
: 7.6234 - val_mean_absolute_error: 2.
1942
1423 Epoch 686/10000
1424 - 14s - loss: 4.7318 -
mean_absolute_error: 1.7028 - val_loss
: 7.6237 - val_mean_absolute_error: 2.
1943
1425 Epoch 687/10000
1426 - 14s - loss: 4.7316 -
mean_absolute_error: 1.7030 - val_loss
: 7.6241 - val_mean_absolute_error: 2.
1942
1427 Epoch 688/10000
1428 - 14s - loss: 4.7315 -
mean_absolute_error: 1.7031 - val_loss
: 7.6244 - val_mean_absolute_error: 2.
1942
1429 Epoch 689/10000
1430 - 14s - loss: 4.7316 -
```

```
1430 mean_absolute_error: 1.7028 - val_loss
    : 7.6245 - val_mean_absolute_error: 2.
1943
1431 Epoch 690/10000
1432   - 14s - loss: 4.7314 -
    mean_absolute_error: 1.7028 - val_loss
    : 7.6246 - val_mean_absolute_error: 2.
1946
1433 Epoch 691/10000
1434   - 14s - loss: 4.7315 -
    mean_absolute_error: 1.7033 - val_loss
    : 7.6243 - val_mean_absolute_error: 2.
1945
1435 Epoch 692/10000
1436   - 14s - loss: 4.7314 -
    mean_absolute_error: 1.7033 - val_loss
    : 7.6244 - val_mean_absolute_error: 2.
1944
1437 Epoch 693/10000
1438   - 14s - loss: 4.7313 -
    mean_absolute_error: 1.7029 - val_loss
    : 7.6247 - val_mean_absolute_error: 2.
1945
1439 Epoch 694/10000
```

```
1440 - 14s - loss: 4.7314 -  
mean_absolute_error: 1.7035 - val_loss  
: 7.6243 - val_mean_absolute_error: 2.  
1945  
1441 Epoch 695/10000  
1442 - 14s - loss: 4.7313 -  
mean_absolute_error: 1.7036 - val_loss  
: 7.6241 - val_mean_absolute_error: 2.  
1943  
1443 Epoch 696/10000  
1444 - 14s - loss: 4.7313 -  
mean_absolute_error: 1.7031 - val_loss  
: 7.6242 - val_mean_absolute_error: 2.  
1942  
1445 Epoch 697/10000  
1446 - 14s - loss: 4.7313 -  
mean_absolute_error: 1.7029 - val_loss  
: 7.6243 - val_mean_absolute_error: 2.  
1945  
1447 Epoch 698/10000  
1448 - 14s - loss: 4.7312 -  
mean_absolute_error: 1.7033 - val_loss  
: 7.6244 - val_mean_absolute_error: 2.  
1941
```

```
1449 Epoch 699/10000
1450   - 14s - loss: 4.7312 -
      mean_absolute_error: 1.7026 - val_loss
      : 7.6245 - val_mean_absolute_error: 2.
1946
1451 Epoch 700/10000
1452   - 14s - loss: 4.7309 -
      mean_absolute_error: 1.7043 - val_loss
      : 7.6244 - val_mean_absolute_error: 2.
1941
1453 Epoch 701/10000
1454   - 14s - loss: 4.7310 -
      mean_absolute_error: 1.7021 - val_loss
      : 7.6243 - val_mean_absolute_error: 2.
1945
1455 Epoch 702/10000
1456   - 14s - loss: 4.7311 -
      mean_absolute_error: 1.7029 - val_loss
      : 7.6242 - val_mean_absolute_error: 2.
1946
1457 Epoch 703/10000
1458   - 14s - loss: 4.7310 -
      mean_absolute_error: 1.7031 - val_loss
      : 7.6244 - val_mean_absolute_error: 2.
```

```
1458 1945
1459 Epoch 704/10000
1460   - 14s - loss: 4.7309 -
      mean_absolute_error: 1.7032 - val_loss
      : 7.6244 - val_mean_absolute_error: 2.
1943
1461 Epoch 705/10000
1462   - 14s - loss: 4.7310 -
      mean_absolute_error: 1.7030 - val_loss
      : 7.6248 - val_mean_absolute_error: 2.
1943
1463 Epoch 706/10000
1464   - 14s - loss: 4.7310 -
      mean_absolute_error: 1.7027 - val_loss
      : 7.6247 - val_mean_absolute_error: 2.
1943
1465 Epoch 707/10000
1466   - 14s - loss: 4.7310 -
      mean_absolute_error: 1.7027 - val_loss
      : 7.6249 - val_mean_absolute_error: 2.
1942
1467 Epoch 708/10000
1468   - 14s - loss: 4.7309 -
      mean_absolute_error: 1.7030 - val_loss
```

```
1468 : 7.6250 - val_mean_absolute_error: 2.
1944
1469 Epoch 709/10000
1470 - 14s - loss: 4.7308 -
mean_absolute_error: 1.7034 - val_loss
: 7.6248 - val_mean_absolute_error: 2.
1944
1471 Epoch 710/10000
1472 - 14s - loss: 4.7308 -
mean_absolute_error: 1.7026 - val_loss
: 7.6247 - val_mean_absolute_error: 2.
1946
1473 Epoch 711/10000
1474 - 14s - loss: 4.7307 -
mean_absolute_error: 1.7031 - val_loss
: 7.6250 - val_mean_absolute_error: 2.
1944
1475 Epoch 712/10000
1476 - 14s - loss: 4.7308 -
mean_absolute_error: 1.7030 - val_loss
: 7.6254 - val_mean_absolute_error: 2.
1945
1477 Epoch 713/10000
1478 - 14s - loss: 4.7304 -
```



```
1478 mean_absolute_error: 1.7027 - val_loss
    : 7.6258 - val_mean_absolute_error: 2.
1951
1479 Epoch 714/10000
1480   - 14s - loss: 4.7308 -
    mean_absolute_error: 1.7033 - val_loss
    : 7.6257 - val_mean_absolute_error: 2.
1949
1481 Epoch 715/10000
1482   - 14s - loss: 4.7307 -
    mean_absolute_error: 1.7031 - val_loss
    : 7.6256 - val_mean_absolute_error: 2.
1949
1483 Epoch 716/10000
1484   - 13s - loss: 4.7304 -
    mean_absolute_error: 1.7025 - val_loss
    : 7.6252 - val_mean_absolute_error: 2.
1952
1485 Epoch 717/10000
1486   - 13s - loss: 4.7306 -
    mean_absolute_error: 1.7033 - val_loss
    : 7.6252 - val_mean_absolute_error: 2.
1952
1487 Epoch 718/10000
```

```
1488 - 14s - loss: 4.7304 -  
mean_absolute_error: 1.7034 - val_loss  
: 7.6250 - val_mean_absolute_error: 2.  
1950  
1489 Epoch 719/10000  
1490 - 14s - loss: 4.7305 -  
mean_absolute_error: 1.7033 - val_loss  
: 7.6248 - val_mean_absolute_error: 2.  
1949  
1491 Epoch 720/10000  
1492 - 14s - loss: 4.7305 -  
mean_absolute_error: 1.7033 - val_loss  
: 7.6249 - val_mean_absolute_error: 2.  
1948  
1493 Epoch 721/10000  
1494 - 14s - loss: 4.7304 -  
mean_absolute_error: 1.7031 - val_loss  
: 7.6251 - val_mean_absolute_error: 2.  
1947  
1495 Epoch 722/10000  
1496 - 14s - loss: 4.7301 -  
mean_absolute_error: 1.7035 - val_loss  
: 7.6251 - val_mean_absolute_error: 2.  
1945
```

```
1497 Epoch 723/10000
1498   - 14s - loss: 4.7304 -
      mean_absolute_error: 1.7028 - val_loss
      : 7.6255 - val_mean_absolute_error: 2.
1945
1499 Epoch 724/10000
1500   - 14s - loss: 4.7303 -
      mean_absolute_error: 1.7026 - val_loss
      : 7.6253 - val_mean_absolute_error: 2.
1949
1501 Epoch 725/10000
1502   - 14s - loss: 4.7302 -
      mean_absolute_error: 1.7032 - val_loss
      : 7.6253 - val_mean_absolute_error: 2.
1948
1503 Epoch 726/10000
1504   - 14s - loss: 4.7302 -
      mean_absolute_error: 1.7032 - val_loss
      : 7.6255 - val_mean_absolute_error: 2.
1949
1505 Epoch 727/10000
1506   - 14s - loss: 4.7302 -
      mean_absolute_error: 1.7022 - val_loss
      : 7.6256 - val_mean_absolute_error: 2.
```

```
1506 1951
1507 Epoch 728/10000
1508   - 14s - loss: 4.7302 -
      mean_absolute_error: 1.7030 - val_loss
      : 7.6259 - val_mean_absolute_error: 2.
1948
1509 Epoch 729/10000
1510   - 14s - loss: 4.7301 -
      mean_absolute_error: 1.7027 - val_loss
      : 7.6258 - val_mean_absolute_error: 2.
1950
1511 Epoch 730/10000
1512   - 14s - loss: 4.7299 -
      mean_absolute_error: 1.7037 - val_loss
      : 7.6261 - val_mean_absolute_error: 2.
1948
1513 Epoch 731/10000
1514   - 14s - loss: 4.7302 -
      mean_absolute_error: 1.7026 - val_loss
      : 7.6261 - val_mean_absolute_error: 2.
1947
1515 Epoch 732/10000
1516   - 14s - loss: 4.7299 -
      mean_absolute_error: 1.7030 - val_loss
```

```
1516 : 7.6263 - val_mean_absolute_error: 2.
1946
1517 Epoch 733/10000
1518 - 14s - loss: 4.7298 -
mean_absolute_error: 1.7030 - val_loss
: 7.6266 - val_mean_absolute_error: 2.
1944
1519 Epoch 734/10000
1520 - 14s - loss: 4.7300 -
mean_absolute_error: 1.7021 - val_loss
: 7.6261 - val_mean_absolute_error: 2.
1947
1521 Epoch 735/10000
1522 - 14s - loss: 4.7300 -
mean_absolute_error: 1.7025 - val_loss
: 7.6259 - val_mean_absolute_error: 2.
1949
1523 Epoch 736/10000
1524 - 14s - loss: 4.7299 -
mean_absolute_error: 1.7032 - val_loss
: 7.6259 - val_mean_absolute_error: 2.
1947
1525 Epoch 737/10000
1526 - 14s - loss: 4.7299 -
```

```
1526 mean_absolute_error: 1.7029 - val_loss
    : 7.6259 - val_mean_absolute_error: 2.
1948
1527 Epoch 738/10000
1528   - 14s - loss: 4.7297 -
    mean_absolute_error: 1.7030 - val_loss
    : 7.6259 - val_mean_absolute_error: 2.
1947
1529 Epoch 739/10000
1530   - 14s - loss: 4.7297 -
    mean_absolute_error: 1.7035 - val_loss
    : 7.6261 - val_mean_absolute_error: 2.
1946
1531 Epoch 740/10000
1532   - 14s - loss: 4.7298 -
    mean_absolute_error: 1.7033 - val_loss
    : 7.6262 - val_mean_absolute_error: 2.
1944
1533 Epoch 741/10000
1534   - 14s - loss: 4.7298 -
    mean_absolute_error: 1.7026 - val_loss
    : 7.6261 - val_mean_absolute_error: 2.
1946
1535 Epoch 742/10000
```

```
1536 - 14s - loss: 4.7297 -  
mean_absolute_error: 1.7026 - val_loss  
: 7.6262 - val_mean_absolute_error: 2.  
1946  
1537 Epoch 743/10000  
1538 - 14s - loss: 4.7297 -  
mean_absolute_error: 1.7025 - val_loss  
: 7.6262 - val_mean_absolute_error: 2.  
1946  
1539 Epoch 744/10000  
1540 - 14s - loss: 4.7297 -  
mean_absolute_error: 1.7029 - val_loss  
: 7.6260 - val_mean_absolute_error: 2.  
1947  
1541 Epoch 745/10000  
1542 - 14s - loss: 4.7295 -  
mean_absolute_error: 1.7026 - val_loss  
: 7.6259 - val_mean_absolute_error: 2.  
1946  
1543 Epoch 746/10000  
1544 - 14s - loss: 4.7295 -  
mean_absolute_error: 1.7026 - val_loss  
: 7.6259 - val_mean_absolute_error: 2.  
1949
```

```
1545 Epoch 747/10000
1546   - 14s - loss: 4.7296 -
      mean_absolute_error: 1.7027 - val_loss
      : 7.6260 - val_mean_absolute_error: 2.
1949
1547 Epoch 748/10000
1548   - 14s - loss: 4.7295 -
      mean_absolute_error: 1.7034 - val_loss
      : 7.6258 - val_mean_absolute_error: 2.
1947
1549 Epoch 749/10000
1550   - 14s - loss: 4.7296 -
      mean_absolute_error: 1.7027 - val_loss
      : 7.6259 - val_mean_absolute_error: 2.
1948
1551 Epoch 750/10000
1552   - 14s - loss: 4.7294 -
      mean_absolute_error: 1.7027 - val_loss
      : 7.6260 - val_mean_absolute_error: 2.
1948
1553 Epoch 751/10000
1554   - 14s - loss: 4.7293 -
      mean_absolute_error: 1.7026 - val_loss
      : 7.6263 - val_mean_absolute_error: 2.
```



```
1554 1950
1555 Epoch 752/10000
1556   - 14s - loss: 4.7294 -
      mean_absolute_error: 1.7030 - val_loss
      : 7.6264 - val_mean_absolute_error: 2.
      1948
1557 Epoch 753/10000
1558   - 14s - loss: 4.7293 -
      mean_absolute_error: 1.7026 - val_loss
      : 7.6261 - val_mean_absolute_error: 2.
      1950
1559 Epoch 754/10000
1560   - 14s - loss: 4.7291 -
      mean_absolute_error: 1.7029 - val_loss
      : 7.6258 - val_mean_absolute_error: 2.
      1951
1561 Epoch 755/10000
1562   - 14s - loss: 4.7292 -
      mean_absolute_error: 1.7032 - val_loss
      : 7.6258 - val_mean_absolute_error: 2.
      1949
1563 Epoch 756/10000
1564   - 14s - loss: 4.7291 -
      mean_absolute_error: 1.7026 - val_loss
```

```
1564 : 7.6258 - val_mean_absolute_error: 2.
1948
1565 Epoch 757/10000
1566 - 14s - loss: 4.7292 -
mean_absolute_error: 1.7024 - val_loss
: 7.6254 - val_mean_absolute_error: 2.
1949
1567 Epoch 758/10000
1568 - 14s - loss: 4.7290 -
mean_absolute_error: 1.7028 - val_loss
: 7.6253 - val_mean_absolute_error: 2.
1949
1569 Epoch 759/10000
1570 - 14s - loss: 4.7291 -
mean_absolute_error: 1.7033 - val_loss
: 7.6252 - val_mean_absolute_error: 2.
1948
1571 Epoch 760/10000
1572 - 14s - loss: 4.7290 -
mean_absolute_error: 1.7028 - val_loss
: 7.6251 - val_mean_absolute_error: 2.
1945
1573 Epoch 761/10000
1574 - 14s - loss: 4.7290 -
```

```
1574 mean_absolute_error: 1.7023 - val_loss
    : 7.6254 - val_mean_absolute_error: 2.
1942
1575 Epoch 762/10000
1576   - 14s - loss: 4.7290 -
    mean_absolute_error: 1.7021 - val_loss
    : 7.6252 - val_mean_absolute_error: 2.
1943
1577 Epoch 763/10000
1578   - 14s - loss: 4.7290 -
    mean_absolute_error: 1.7022 - val_loss
    : 7.6253 - val_mean_absolute_error: 2.
1945
1579 Epoch 764/10000
1580   - 14s - loss: 4.7289 -
    mean_absolute_error: 1.7024 - val_loss
    : 7.6253 - val_mean_absolute_error: 2.
1948
1581 Epoch 765/10000
1582   - 14s - loss: 4.7287 -
    mean_absolute_error: 1.7024 - val_loss
    : 7.6257 - val_mean_absolute_error: 2.
1951
1583 Epoch 766/10000
```

```
1584 - 14s - loss: 4.7288 -  
mean_absolute_error: 1.7031 - val_loss  
: 7.6258 - val_mean_absolute_error: 2.  
1950  
1585 Epoch 767/10000  
1586 - 14s - loss: 4.7288 -  
mean_absolute_error: 1.7030 - val_loss  
: 7.6258 - val_mean_absolute_error: 2.  
1949  
1587 Epoch 768/10000  
1588 - 14s - loss: 4.7287 -  
mean_absolute_error: 1.7027 - val_loss  
: 7.6258 - val_mean_absolute_error: 2.  
1946  
1589 Epoch 769/10000  
1590 - 14s - loss: 4.7287 -  
mean_absolute_error: 1.7029 - val_loss  
: 7.6261 - val_mean_absolute_error: 2.  
1946  
1591 Epoch 770/10000  
1592 - 14s - loss: 4.7287 -  
mean_absolute_error: 1.7028 - val_loss  
: 7.6259 - val_mean_absolute_error: 2.  
1947
```

```
1593 Epoch 771/10000
1594   - 14s - loss: 4.7286 -
      mean_absolute_error: 1.7028 - val_loss
      : 7.6263 - val_mean_absolute_error: 2.
1947
1595 Epoch 772/10000
1596   - 14s - loss: 4.7286 -
      mean_absolute_error: 1.7026 - val_loss
      : 7.6263 - val_mean_absolute_error: 2.
1947
1597 Epoch 773/10000
1598   - 14s - loss: 4.7286 -
      mean_absolute_error: 1.7026 - val_loss
      : 7.6267 - val_mean_absolute_error: 2.
1949
1599 Epoch 774/10000
1600   - 14s - loss: 4.7284 -
      mean_absolute_error: 1.7021 - val_loss
      : 7.6264 - val_mean_absolute_error: 2.
1953
1601 Epoch 775/10000
1602   - 14s - loss: 4.7284 -
      mean_absolute_error: 1.7024 - val_loss
      : 7.6264 - val_mean_absolute_error: 2.
```

```
1602 1954
1603 Epoch 776/10000
1604   - 14s - loss: 4.7284 -
      mean_absolute_error: 1.7029 - val_loss
      : 7.6268 - val_mean_absolute_error: 2.
1953
1605 Epoch 777/10000
1606   - 14s - loss: 4.7284 -
      mean_absolute_error: 1.7028 - val_loss
      : 7.6268 - val_mean_absolute_error: 2.
1954
1607 Epoch 778/10000
1608   - 14s - loss: 4.7283 -
      mean_absolute_error: 1.7032 - val_loss
      : 7.6268 - val_mean_absolute_error: 2.
1951
1609 Epoch 779/10000
1610   - 14s - loss: 4.7281 -
      mean_absolute_error: 1.7024 - val_loss
      : 7.6265 - val_mean_absolute_error: 2.
1953
1611 Epoch 780/10000
1612   - 14s - loss: 4.7284 -
      mean_absolute_error: 1.7025 - val_loss
```

```
1612 : 7.6266 - val_mean_absolute_error: 2.
1951
1613 Epoch 781/10000
1614 - 14s - loss: 4.7283 -
mean_absolute_error: 1.7035 - val_loss
: 7.6265 - val_mean_absolute_error: 2.
1947
1615 Epoch 782/10000
1616 - 14s - loss: 4.7283 -
mean_absolute_error: 1.7023 - val_loss
: 7.6266 - val_mean_absolute_error: 2.
1947
1617 Epoch 783/10000
1618 - 14s - loss: 4.7283 -
mean_absolute_error: 1.7021 - val_loss
: 7.6266 - val_mean_absolute_error: 2.
1947
1619 Epoch 784/10000
1620 - 14s - loss: 4.7283 -
mean_absolute_error: 1.7025 - val_loss
: 7.6266 - val_mean_absolute_error: 2.
1949
1621 Epoch 785/10000
1622 - 14s - loss: 4.7279 -
```

```
1622 mean_absolute_error: 1.7028 - val_loss
    : 7.6270 - val_mean_absolute_error: 2.
1945
1623 Epoch 786/10000
1624   - 14s - loss: 4.7281 -
    mean_absolute_error: 1.7027 - val_loss
    : 7.6269 - val_mean_absolute_error: 2.
1946
1625 Epoch 787/10000
1626   - 14s - loss: 4.7281 -
    mean_absolute_error: 1.7021 - val_loss
    : 7.6269 - val_mean_absolute_error: 2.
1947
1627 Epoch 788/10000
1628   - 14s - loss: 4.7280 -
    mean_absolute_error: 1.7023 - val_loss
    : 7.6272 - val_mean_absolute_error: 2.
1949
1629 Epoch 789/10000
1630   - 14s - loss: 4.7280 -
    mean_absolute_error: 1.7025 - val_loss
    : 7.6270 - val_mean_absolute_error: 2.
1947
1631 Epoch 790/10000
```



```
1632 - 14s - loss: 4.7280 -  
mean_absolute_error: 1.7023 - val_loss  
: 7.6270 - val_mean_absolute_error: 2.  
1948  
1633 Epoch 791/10000  
1634 - 14s - loss: 4.7279 -  
mean_absolute_error: 1.7024 - val_loss  
: 7.6270 - val_mean_absolute_error: 2.  
1948  
1635 Epoch 792/10000  
1636 - 14s - loss: 4.7279 -  
mean_absolute_error: 1.7022 - val_loss  
: 7.6273 - val_mean_absolute_error: 2.  
1949  
1637 Epoch 793/10000  
1638 - 14s - loss: 4.7278 -  
mean_absolute_error: 1.7023 - val_loss  
: 7.6271 - val_mean_absolute_error: 2.  
1948  
1639 Epoch 794/10000  
1640 - 14s - loss: 4.7278 -  
mean_absolute_error: 1.7022 - val_loss  
: 7.6273 - val_mean_absolute_error: 2.  
1950
```

```
1641 Epoch 795/10000
1642   - 13s - loss: 4.7278 -
      mean_absolute_error: 1.7028 - val_loss
      : 7.6271 - val_mean_absolute_error: 2.
1950
1643 Epoch 796/10000
1644   - 13s - loss: 4.7277 -
      mean_absolute_error: 1.7027 - val_loss
      : 7.6269 - val_mean_absolute_error: 2.
1948
1645 Epoch 797/10000
1646   - 14s - loss: 4.7277 -
      mean_absolute_error: 1.7021 - val_loss
      : 7.6266 - val_mean_absolute_error: 2.
1950
1647 Epoch 798/10000
1648   - 14s - loss: 4.7276 -
      mean_absolute_error: 1.7026 - val_loss
      : 7.6269 - val_mean_absolute_error: 2.
1947
1649 Epoch 799/10000
1650   - 14s - loss: 4.7278 -
      mean_absolute_error: 1.7022 - val_loss
      : 7.6271 - val_mean_absolute_error: 2.
```

```
1650 1950
1651 Epoch 800/10000
1652   - 14s - loss: 4.7276 -
      mean_absolute_error: 1.7029 - val_loss
      : 7.6268 - val_mean_absolute_error: 2.
1948
1653 Epoch 801/10000
1654   - 14s - loss: 4.7276 -
      mean_absolute_error: 1.7014 - val_loss
      : 7.6269 - val_mean_absolute_error: 2.
1950
1655 Epoch 802/10000
1656   - 14s - loss: 4.7277 -
      mean_absolute_error: 1.7021 - val_loss
      : 7.6270 - val_mean_absolute_error: 2.
1949
1657 Epoch 803/10000
1658   - 14s - loss: 4.7275 -
      mean_absolute_error: 1.7022 - val_loss
      : 7.6273 - val_mean_absolute_error: 2.
1951
1659 Epoch 804/10000
1660   - 14s - loss: 4.7275 -
      mean_absolute_error: 1.7024 - val_loss
```

```
1660 : 7.6274 - val_mean_absolute_error: 2.
1951
1661 Epoch 805/10000
1662 - 14s - loss: 4.7274 -
mean_absolute_error: 1.7018 - val_loss
: 7.6272 - val_mean_absolute_error: 2.
1953
1663 Epoch 806/10000
1664 - 14s - loss: 4.7272 -
mean_absolute_error: 1.7031 - val_loss
: 7.6270 - val_mean_absolute_error: 2.
1949
1665 Epoch 807/10000
1666 - 14s - loss: 4.7274 -
mean_absolute_error: 1.7023 - val_loss
: 7.6267 - val_mean_absolute_error: 2.
1950
1667 Epoch 808/10000
1668 - 13s - loss: 4.7274 -
mean_absolute_error: 1.7025 - val_loss
: 7.6266 - val_mean_absolute_error: 2.
1949
1669 Epoch 809/10000
1670 - 13s - loss: 4.7273 -
```

```
1670 mean_absolute_error: 1.7025 - val_loss
    : 7.6268 - val_mean_absolute_error: 2.
1950
1671 Epoch 810/10000
1672   - 14s - loss: 4.7272 -
    mean_absolute_error: 1.7022 - val_loss
    : 7.6270 - val_mean_absolute_error: 2.
1953
1673 Epoch 811/10000
1674   - 14s - loss: 4.7272 -
    mean_absolute_error: 1.7028 - val_loss
    : 7.6272 - val_mean_absolute_error: 2.
1951
1675 Epoch 812/10000
1676   - 13s - loss: 4.7272 -
    mean_absolute_error: 1.7021 - val_loss
    : 7.6272 - val_mean_absolute_error: 2.
1952
1677 Epoch 813/10000
1678   - 14s - loss: 4.7273 -
    mean_absolute_error: 1.7028 - val_loss
    : 7.6274 - val_mean_absolute_error: 2.
1951
1679 Epoch 814/10000
```

```
1680 - 14s - loss: 4.7271 -  
mean_absolute_error: 1.7024 - val_loss  
: 7.6276 - val_mean_absolute_error: 2.  
1950  
1681 Epoch 815/10000  
1682 - 14s - loss: 4.7271 -  
mean_absolute_error: 1.7022 - val_loss  
: 7.6276 - val_mean_absolute_error: 2.  
1950  
1683 Epoch 816/10000  
1684 - 14s - loss: 4.7270 -  
mean_absolute_error: 1.7021 - val_loss  
: 7.6275 - val_mean_absolute_error: 2.  
1951  
1685 Epoch 817/10000  
1686 - 14s - loss: 4.7269 -  
mean_absolute_error: 1.7023 - val_loss  
: 7.6276 - val_mean_absolute_error: 2.  
1951  
1687 Epoch 818/10000  
1688 - 14s - loss: 4.7270 -  
mean_absolute_error: 1.7025 - val_loss  
: 7.6277 - val_mean_absolute_error: 2.  
1950
```

```
1689 Epoch 819/10000
1690   - 14s - loss: 4.7270 -
      mean_absolute_error: 1.7019 - val_loss
      : 7.6279 - val_mean_absolute_error: 2.
1951
1691 Epoch 820/10000
1692   - 14s - loss: 4.7267 -
      mean_absolute_error: 1.7018 - val_loss
      : 7.6275 - val_mean_absolute_error: 2.
1952
1693 Epoch 821/10000
1694   - 14s - loss: 4.7268 -
      mean_absolute_error: 1.7025 - val_loss
      : 7.6276 - val_mean_absolute_error: 2.
1949
1695 Epoch 822/10000
1696   - 14s - loss: 4.7267 -
      mean_absolute_error: 1.7029 - val_loss
      : 7.6279 - val_mean_absolute_error: 2.
1948
1697 Epoch 823/10000
1698   - 14s - loss: 4.7268 -
      mean_absolute_error: 1.7018 - val_loss
      : 7.6278 - val_mean_absolute_error: 2.
```

```
1698 1949
1699 Epoch 824/10000
1700   - 14s - loss: 4.7267 -
      mean_absolute_error: 1.7023 - val_loss
      : 7.6280 - val_mean_absolute_error: 2.
1950
1701 Epoch 825/10000
1702   - 14s - loss: 4.7267 -
      mean_absolute_error: 1.7028 - val_loss
      : 7.6282 - val_mean_absolute_error: 2.
1949
1703 Epoch 826/10000
1704   - 14s - loss: 4.7268 -
      mean_absolute_error: 1.7026 - val_loss
      : 7.6283 - val_mean_absolute_error: 2.
1948
1705 Epoch 827/10000
1706   - 14s - loss: 4.7264 -
      mean_absolute_error: 1.7029 - val_loss
      : 7.6282 - val_mean_absolute_error: 2.
1944
1707 Epoch 828/10000
1708   - 14s - loss: 4.7267 -
      mean_absolute_error: 1.7019 - val_loss
```



```
1708 : 7.6282 - val_mean_absolute_error: 2.
1947
1709 Epoch 829/10000
1710 - 13s - loss: 4.7268 -
mean_absolute_error: 1.7020 - val_loss
: 7.6282 - val_mean_absolute_error: 2.
1948
1711 Epoch 830/10000
1712 - 14s - loss: 4.7265 -
mean_absolute_error: 1.7020 - val_loss
: 7.6281 - val_mean_absolute_error: 2.
1950
1713 Epoch 831/10000
1714 - 14s - loss: 4.7265 -
mean_absolute_error: 1.7025 - val_loss
: 7.6282 - val_mean_absolute_error: 2.
1948
1715 Epoch 832/10000
1716 - 14s - loss: 4.7265 -
mean_absolute_error: 1.7017 - val_loss
: 7.6282 - val_mean_absolute_error: 2.
1952
1717 Epoch 833/10000
1718 - 14s - loss: 4.7263 -
```

```
1718 mean_absolute_error: 1.7026 - val_loss
    : 7.6282 - val_mean_absolute_error: 2.
1948
1719 Epoch 834/10000
1720   - 14s - loss: 4.7264 -
    mean_absolute_error: 1.7020 - val_loss
    : 7.6280 - val_mean_absolute_error: 2.
1949
1721 Epoch 835/10000
1722   - 14s - loss: 4.7264 -
    mean_absolute_error: 1.7015 - val_loss
    : 7.6279 - val_mean_absolute_error: 2.
1951
1723 Epoch 836/10000
1724   - 14s - loss: 4.7262 -
    mean_absolute_error: 1.7016 - val_loss
    : 7.6281 - val_mean_absolute_error: 2.
1954
1725 Epoch 837/10000
1726   - 14s - loss: 4.7262 -
    mean_absolute_error: 1.7029 - val_loss
    : 7.6281 - val_mean_absolute_error: 2.
1951
1727 Epoch 838/10000
```

```
1728 - 14s - loss: 4.7263 -  
mean_absolute_error: 1.7022 - val_loss  
: 7.6278 - val_mean_absolute_error: 2.  
1952  
1729 Epoch 839/10000  
1730 - 14s - loss: 4.7262 -  
mean_absolute_error: 1.7021 - val_loss  
: 7.6277 - val_mean_absolute_error: 2.  
1951  
1731 Epoch 840/10000  
1732 - 14s - loss: 4.7262 -  
mean_absolute_error: 1.7021 - val_loss  
: 7.6279 - val_mean_absolute_error: 2.  
1952  
1733 Epoch 841/10000  
1734 - 14s - loss: 4.7260 -  
mean_absolute_error: 1.7025 - val_loss  
: 7.6280 - val_mean_absolute_error: 2.  
1950  
1735 Epoch 842/10000  
1736 - 14s - loss: 4.7261 -  
mean_absolute_error: 1.7022 - val_loss  
: 7.6280 - val_mean_absolute_error: 2.  
1949
```

```
1737 Epoch 843/10000
1738   - 14s - loss: 4.7261 -
      mean_absolute_error: 1.7016 - val_loss
      : 7.6279 - val_mean_absolute_error: 2.
1951
1739 Epoch 844/10000
1740   - 13s - loss: 4.7260 -
      mean_absolute_error: 1.7025 - val_loss
      : 7.6282 - val_mean_absolute_error: 2.
1949
1741 Epoch 845/10000
1742   - 13s - loss: 4.7260 -
      mean_absolute_error: 1.7017 - val_loss
      : 7.6282 - val_mean_absolute_error: 2.
1952
1743 Epoch 846/10000
1744   - 14s - loss: 4.7258 -
      mean_absolute_error: 1.7023 - val_loss
      : 7.6285 - val_mean_absolute_error: 2.
1948
1745 Epoch 847/10000
1746   - 14s - loss: 4.7261 -
      mean_absolute_error: 1.7014 - val_loss
      : 7.6287 - val_mean_absolute_error: 2.
```

```
1746 1950
1747 Epoch 848/10000
1748   - 14s - loss: 4.7259 -
      mean_absolute_error: 1.7015 - val_loss
      : 7.6285 - val_mean_absolute_error: 2.
1949
1749 Epoch 849/10000
1750   - 14s - loss: 4.7259 -
      mean_absolute_error: 1.7017 - val_loss
      : 7.6282 - val_mean_absolute_error: 2.
1949
1751 Epoch 850/10000
1752   - 13s - loss: 4.7258 -
      mean_absolute_error: 1.7023 - val_loss
      : 7.6284 - val_mean_absolute_error: 2.
1948
1753 Epoch 851/10000
1754   - 14s - loss: 4.7256 -
      mean_absolute_error: 1.7022 - val_loss
      : 7.6284 - val_mean_absolute_error: 2.
1947
1755 Epoch 852/10000
1756   - 14s - loss: 4.7257 -
      mean_absolute_error: 1.7017 - val_loss
```

```
1756 : 7.6284 - val_mean_absolute_error: 2.
1950
1757 Epoch 853/10000
1758 - 14s - loss: 4.7258 -
mean_absolute_error: 1.7026 - val_loss
: 7.6283 - val_mean_absolute_error: 2.
1949
1759 Epoch 854/10000
1760 - 14s - loss: 4.7257 -
mean_absolute_error: 1.7020 - val_loss
: 7.6289 - val_mean_absolute_error: 2.
1950
1761 Epoch 855/10000
1762 - 14s - loss: 4.7256 -
mean_absolute_error: 1.7022 - val_loss
: 7.6289 - val_mean_absolute_error: 2.
1952
1763 Epoch 856/10000
1764 - 14s - loss: 4.7256 -
mean_absolute_error: 1.7017 - val_loss
: 7.6286 - val_mean_absolute_error: 2.
1951
1765 Epoch 857/10000
1766 - 14s - loss: 4.7256 -
```

```
1766 mean_absolute_error: 1.7019 - val_loss
    : 7.6286 - val_mean_absolute_error: 2.
1952
1767 Epoch 858/10000
1768   - 14s - loss: 4.7255 -
    mean_absolute_error: 1.7022 - val_loss
    : 7.6286 - val_mean_absolute_error: 2.
1951
1769 Epoch 859/10000
1770   - 14s - loss: 4.7255 -
    mean_absolute_error: 1.7024 - val_loss
    : 7.6287 - val_mean_absolute_error: 2.
1951
1771 Epoch 860/10000
1772   - 14s - loss: 4.7257 -
    mean_absolute_error: 1.7023 - val_loss
    : 7.6285 - val_mean_absolute_error: 2.
1951
1773 Epoch 861/10000
1774   - 14s - loss: 4.7252 -
    mean_absolute_error: 1.7025 - val_loss
    : 7.6286 - val_mean_absolute_error: 2.
1949
1775 Epoch 862/10000
```

```
1776 - 13s - loss: 4.7254 -  
mean_absolute_error: 1.7016 - val_loss  
: 7.6285 - val_mean_absolute_error: 2.  
1953  
1777 Epoch 863/10000  
1778 - 13s - loss: 4.7253 -  
mean_absolute_error: 1.7021 - val_loss  
: 7.6283 - val_mean_absolute_error: 2.  
1953  
1779 Epoch 864/10000  
1780 - 14s - loss: 4.7254 -  
mean_absolute_error: 1.7022 - val_loss  
: 7.6286 - val_mean_absolute_error: 2.  
1951  
1781 Epoch 865/10000  
1782 - 14s - loss: 4.7252 -  
mean_absolute_error: 1.7020 - val_loss  
: 7.6288 - val_mean_absolute_error: 2.  
1950  
1783 Epoch 866/10000  
1784 - 14s - loss: 4.7253 -  
mean_absolute_error: 1.7016 - val_loss  
: 7.6287 - val_mean_absolute_error: 2.  
1952
```



```
1785 Epoch 867/10000
1786   - 14s - loss: 4.7252 -
      mean_absolute_error: 1.7024 - val_loss
      : 7.6286 - val_mean_absolute_error: 2.
      1953
1787 Epoch 868/10000
1788   - 14s - loss: 4.7253 -
      mean_absolute_error: 1.7021 - val_loss
      : 7.6285 - val_mean_absolute_error: 2.
      1950
1789 Epoch 869/10000
1790   - 14s - loss: 4.7250 -
      mean_absolute_error: 1.7020 - val_loss
      : 7.6290 - val_mean_absolute_error: 2.
      1949
1791 Epoch 870/10000
1792   - 14s - loss: 4.7250 -
      mean_absolute_error: 1.7016 - val_loss
      : 7.6289 - val_mean_absolute_error: 2.
      1953
1793 Epoch 871/10000
1794   - 14s - loss: 4.7249 -
      mean_absolute_error: 1.7016 - val_loss
      : 7.6291 - val_mean_absolute_error: 2.
```

```
1794 1956
1795 Epoch 872/10000
1796   - 14s - loss: 4.7251 -
      mean_absolute_error: 1.7021 - val_loss
      : 7.6295 - val_mean_absolute_error: 2.
1955
1797 Epoch 873/10000
1798   - 14s - loss: 4.7249 -
      mean_absolute_error: 1.7015 - val_loss
      : 7.6294 - val_mean_absolute_error: 2.
1958
1799 Epoch 874/10000
1800   - 14s - loss: 4.7250 -
      mean_absolute_error: 1.7024 - val_loss
      : 7.6293 - val_mean_absolute_error: 2.
1957
1801 Epoch 875/10000
1802   - 14s - loss: 4.7249 -
      mean_absolute_error: 1.7023 - val_loss
      : 7.6291 - val_mean_absolute_error: 2.
1956
1803 Epoch 876/10000
1804   - 14s - loss: 4.7249 -
      mean_absolute_error: 1.7022 - val_loss
```

```
1804 : 7.6293 - val_mean_absolute_error: 2.
1953
1805 Epoch 877/10000
1806 - 14s - loss: 4.7250 -
mean_absolute_error: 1.7015 - val_loss
: 7.6294 - val_mean_absolute_error: 2.
1952
1807 Epoch 878/10000
1808 - 14s - loss: 4.7246 -
mean_absolute_error: 1.7017 - val_loss
: 7.6291 - val_mean_absolute_error: 2.
1954
1809 Epoch 879/10000
1810 - 14s - loss: 4.7248 -
mean_absolute_error: 1.7020 - val_loss
: 7.6292 - val_mean_absolute_error: 2.
1954
1811 Epoch 880/10000
1812 - 14s - loss: 4.7247 -
mean_absolute_error: 1.7018 - val_loss
: 7.6293 - val_mean_absolute_error: 2.
1955
1813 Epoch 881/10000
1814 - 14s - loss: 4.7247 -
```

```
1814 mean_absolute_error: 1.7017 - val_loss
    : 7.6293 - val_mean_absolute_error: 2.
1954
1815 Epoch 882/10000
1816   - 14s - loss: 4.7247 -
    mean_absolute_error: 1.7017 - val_loss
    : 7.6292 - val_mean_absolute_error: 2.
1956
1817 Epoch 883/10000
1818   - 14s - loss: 4.7247 -
    mean_absolute_error: 1.7024 - val_loss
    : 7.6294 - val_mean_absolute_error: 2.
1954
1819 Epoch 884/10000
1820   - 14s - loss: 4.7246 -
    mean_absolute_error: 1.7021 - val_loss
    : 7.6294 - val_mean_absolute_error: 2.
1954
1821 Epoch 885/10000
1822   - 14s - loss: 4.7246 -
    mean_absolute_error: 1.7019 - val_loss
    : 7.6296 - val_mean_absolute_error: 2.
1953
1823 Epoch 886/10000
```

```
1824 - 14s - loss: 4.7245 -  
mean_absolute_error: 1.7016 - val_loss  
: 7.6297 - val_mean_absolute_error: 2.  
1956  
1825 Epoch 887/10000  
1826 - 14s - loss: 4.7246 -  
mean_absolute_error: 1.7019 - val_loss  
: 7.6296 - val_mean_absolute_error: 2.  
1956  
1827 Epoch 888/10000  
1828 - 14s - loss: 4.7245 -  
mean_absolute_error: 1.7020 - val_loss  
: 7.6295 - val_mean_absolute_error: 2.  
1957  
1829 Epoch 889/10000  
1830 - 14s - loss: 4.7245 -  
mean_absolute_error: 1.7030 - val_loss  
: 7.6294 - val_mean_absolute_error: 2.  
1952  
1831 Epoch 890/10000  
1832 - 14s - loss: 4.7244 -  
mean_absolute_error: 1.7019 - val_loss  
: 7.6296 - val_mean_absolute_error: 2.  
1953
```

```
1833 Epoch 891/10000
1834   - 14s - loss: 4.7243 -
      mean_absolute_error: 1.7014 - val_loss
      : 7.6295 - val_mean_absolute_error: 2.
      1954
1835 Epoch 892/10000
1836   - 14s - loss: 4.7244 -
      mean_absolute_error: 1.7020 - val_loss
      : 7.6292 - val_mean_absolute_error: 2.
      1952
1837 Epoch 893/10000
1838   - 14s - loss: 4.7243 -
      mean_absolute_error: 1.7021 - val_loss
      : 7.6295 - val_mean_absolute_error: 2.
      1950
1839 Epoch 894/10000
1840   - 14s - loss: 4.7242 -
      mean_absolute_error: 1.7018 - val_loss
      : 7.6298 - val_mean_absolute_error: 2.
      1951
1841 Epoch 895/10000
1842   - 14s - loss: 4.7243 -
      mean_absolute_error: 1.7010 - val_loss
      : 7.6295 - val_mean_absolute_error: 2.
```

```
1842 1953
1843 Epoch 896/10000
1844 - 14s - loss: 4.7242 -
      mean_absolute_error: 1.7024 - val_loss
      : 7.6297 - val_mean_absolute_error: 2.
1950
1845 Epoch 897/10000
1846 - 14s - loss: 4.7242 -
      mean_absolute_error: 1.7014 - val_loss
      : 7.6300 - val_mean_absolute_error: 2.
1951
1847 Epoch 898/10000
1848 - 14s - loss: 4.7240 -
      mean_absolute_error: 1.7016 - val_loss
      : 7.6300 - val_mean_absolute_error: 2.
1953
1849 Epoch 899/10000
1850 - 14s - loss: 4.7242 -
      mean_absolute_error: 1.7019 - val_loss
      : 7.6296 - val_mean_absolute_error: 2.
1952
1851 Epoch 900/10000
1852 - 14s - loss: 4.7241 -
      mean_absolute_error: 1.7015 - val_loss
```

```
1852 : 7.6299 - val_mean_absolute_error: 2.
1952
1853 Epoch 901/10000
1854 - 14s - loss: 4.7241 -
mean_absolute_error: 1.7019 - val_loss
: 7.6299 - val_mean_absolute_error: 2.
1953
1855 Epoch 902/10000
1856 - 14s - loss: 4.7240 -
mean_absolute_error: 1.7017 - val_loss
: 7.6299 - val_mean_absolute_error: 2.
1953
1857 Epoch 903/10000
1858 - 14s - loss: 4.7239 -
mean_absolute_error: 1.7013 - val_loss
: 7.6301 - val_mean_absolute_error: 2.
1956
1859 Epoch 904/10000
1860 - 14s - loss: 4.7239 -
mean_absolute_error: 1.7017 - val_loss
: 7.6303 - val_mean_absolute_error: 2.
1957
1861 Epoch 905/10000
1862 - 14s - loss: 4.7237 -
```



```
1862 mean_absolute_error: 1.7026 - val_loss
    : 7.6300 - val_mean_absolute_error: 2.
1953
1863 Epoch 906/10000
1864   - 14s - loss: 4.7237 -
    mean_absolute_error: 1.7025 - val_loss
    : 7.6300 - val_mean_absolute_error: 2.
1952
1865 Epoch 907/10000
1866   - 14s - loss: 4.7239 -
    mean_absolute_error: 1.7015 - val_loss
    : 7.6301 - val_mean_absolute_error: 2.
1953
1867 Epoch 908/10000
1868   - 14s - loss: 4.7237 -
    mean_absolute_error: 1.7012 - val_loss
    : 7.6300 - val_mean_absolute_error: 2.
1954
1869 Epoch 909/10000
1870   - 14s - loss: 4.7236 -
    mean_absolute_error: 1.7016 - val_loss
    : 7.6301 - val_mean_absolute_error: 2.
1953
1871 Epoch 910/10000
```

```
1872 - 14s - loss: 4.7234 -  
mean_absolute_error: 1.7013 - val_loss  
: 7.6300 - val_mean_absolute_error: 2.  
1956  
1873 Epoch 911/10000  
1874 - 14s - loss: 4.7235 -  
mean_absolute_error: 1.7019 - val_loss  
: 7.6301 - val_mean_absolute_error: 2.  
1958  
1875 Epoch 912/10000  
1876 - 14s - loss: 4.7235 -  
mean_absolute_error: 1.7013 - val_loss  
: 7.6299 - val_mean_absolute_error: 2.  
1960  
1877 Epoch 913/10000  
1878 - 14s - loss: 4.7236 -  
mean_absolute_error: 1.7021 - val_loss  
: 7.6302 - val_mean_absolute_error: 2.  
1962  
1879 Epoch 914/10000  
1880 - 14s - loss: 4.7236 -  
mean_absolute_error: 1.7022 - val_loss  
: 7.6304 - val_mean_absolute_error: 2.  
1959
```

```
1881 Epoch 915/10000
1882   - 14s - loss: 4.7235 -
      mean_absolute_error: 1.7025 - val_loss
      : 7.6306 - val_mean_absolute_error: 2.
      1956
1883 Epoch 916/10000
1884   - 14s - loss: 4.7235 -
      mean_absolute_error: 1.7020 - val_loss
      : 7.6306 - val_mean_absolute_error: 2.
      1955
1885 Epoch 917/10000
1886   - 14s - loss: 4.7234 -
      mean_absolute_error: 1.7016 - val_loss
      : 7.6304 - val_mean_absolute_error: 2.
      1957
1887 Epoch 918/10000
1888   - 14s - loss: 4.7233 -
      mean_absolute_error: 1.7022 - val_loss
      : 7.6304 - val_mean_absolute_error: 2.
      1954
1889 Epoch 919/10000
1890   - 14s - loss: 4.7233 -
      mean_absolute_error: 1.7017 - val_loss
      : 7.6303 - val_mean_absolute_error: 2.
```

```
1890 1953
1891 Epoch 920/10000
1892   - 14s - loss: 4.7234 -
      mean_absolute_error: 1.7012 - val_loss
      : 7.6304 - val_mean_absolute_error: 2.
1954
1893 Epoch 921/10000
1894   - 14s - loss: 4.7231 -
      mean_absolute_error: 1.7029 - val_loss
      : 7.6308 - val_mean_absolute_error: 2.
1950
1895 Epoch 922/10000
1896   - 14s - loss: 4.7233 -
      mean_absolute_error: 1.7016 - val_loss
      : 7.6311 - val_mean_absolute_error: 2.
1949
1897 Epoch 923/10000
1898   - 14s - loss: 4.7230 -
      mean_absolute_error: 1.7000 - val_loss
      : 7.6309 - val_mean_absolute_error: 2.
1955
1899 Epoch 924/10000
1900   - 14s - loss: 4.7232 -
      mean_absolute_error: 1.7012 - val_loss
```

```
1900 : 7.6307 - val_mean_absolute_error: 2.
1956
1901 Epoch 925/10000
1902 - 14s - loss: 4.7232 -
mean_absolute_error: 1.7012 - val_loss
: 7.6310 - val_mean_absolute_error: 2.
1956
1903 Epoch 926/10000
1904 - 14s - loss: 4.7229 -
mean_absolute_error: 1.7023 - val_loss
: 7.6308 - val_mean_absolute_error: 2.
1953
1905 Epoch 927/10000
1906 - 14s - loss: 4.7230 -
mean_absolute_error: 1.7010 - val_loss
: 7.6306 - val_mean_absolute_error: 2.
1956
1907 Epoch 928/10000
1908 - 14s - loss: 4.7230 -
mean_absolute_error: 1.7015 - val_loss
: 7.6307 - val_mean_absolute_error: 2.
1956
1909 Epoch 929/10000
1910 - 14s - loss: 4.7230 -
```

```
1910 mean_absolute_error: 1.7016 - val_loss
    : 7.6308 - val_mean_absolute_error: 2.
1957
1911 Epoch 930/10000
1912   - 14s - loss: 4.7230 -
    mean_absolute_error: 1.7020 - val_loss
    : 7.6308 - val_mean_absolute_error: 2.
1956
1913 Epoch 931/10000
1914   - 14s - loss: 4.7229 -
    mean_absolute_error: 1.7016 - val_loss
    : 7.6308 - val_mean_absolute_error: 2.
1956
1915 Epoch 932/10000
1916   - 14s - loss: 4.7229 -
    mean_absolute_error: 1.7012 - val_loss
    : 7.6308 - val_mean_absolute_error: 2.
1958
1917 Epoch 933/10000
1918   - 14s - loss: 4.7229 -
    mean_absolute_error: 1.7018 - val_loss
    : 7.6307 - val_mean_absolute_error: 2.
1957
1919 Epoch 934/10000
```

```
1920 - 14s - loss: 4.7228 -  
mean_absolute_error: 1.7015 - val_loss  
: 7.6308 - val_mean_absolute_error: 2.  
1957  
1921 Epoch 935/10000  
1922 - 14s - loss: 4.7228 -  
mean_absolute_error: 1.7019 - val_loss  
: 7.6309 - val_mean_absolute_error: 2.  
1956  
1923 Epoch 936/10000  
1924 - 14s - loss: 4.7226 -  
mean_absolute_error: 1.7013 - val_loss  
: 7.6310 - val_mean_absolute_error: 2.  
1955  
1925 Epoch 937/10000  
1926 - 14s - loss: 4.7227 -  
mean_absolute_error: 1.7014 - val_loss  
: 7.6309 - val_mean_absolute_error: 2.  
1956  
1927 Epoch 938/10000  
1928 - 14s - loss: 4.7226 -  
mean_absolute_error: 1.7019 - val_loss  
: 7.6310 - val_mean_absolute_error: 2.  
1954
```

```
1929 Epoch 939/10000
1930   - 14s - loss: 4.7226 -
      mean_absolute_error: 1.7016 - val_loss
      : 7.6312 - val_mean_absolute_error: 2.
1953
1931 Epoch 940/10000
1932   - 14s - loss: 4.7226 -
      mean_absolute_error: 1.7012 - val_loss
      : 7.6309 - val_mean_absolute_error: 2.
1955
1933 Epoch 941/10000
1934   - 14s - loss: 4.7226 -
      mean_absolute_error: 1.7007 - val_loss
      : 7.6310 - val_mean_absolute_error: 2.
1956
1935 Epoch 942/10000
1936   - 14s - loss: 4.7224 -
      mean_absolute_error: 1.7014 - val_loss
      : 7.6312 - val_mean_absolute_error: 2.
1958
1937 Epoch 943/10000
1938   - 14s - loss: 4.7226 -
      mean_absolute_error: 1.7013 - val_loss
      : 7.6307 - val_mean_absolute_error: 2.
```



```
1938 1957
1939 Epoch 944/10000
1940   - 14s - loss: 4.7224 -
      mean_absolute_error: 1.7018 - val_loss
      : 7.6310 - val_mean_absolute_error: 2.
1955
1941 Epoch 945/10000
1942   - 14s - loss: 4.7223 -
      mean_absolute_error: 1.7022 - val_loss
      : 7.6313 - val_mean_absolute_error: 2.
1953
1943 Epoch 946/10000
1944   - 14s - loss: 4.7223 -
      mean_absolute_error: 1.7014 - val_loss
      : 7.6314 - val_mean_absolute_error: 2.
1954
1945 Epoch 947/10000
1946   - 14s - loss: 4.7224 -
      mean_absolute_error: 1.7014 - val_loss
      : 7.6316 - val_mean_absolute_error: 2.
1954
1947 Epoch 948/10000
1948   - 14s - loss: 4.7224 -
      mean_absolute_error: 1.7006 - val_loss
```

```
1948 : 7.6316 - val_mean_absolute_error: 2.
1957
1949 Epoch 949/10000
1950 - 14s - loss: 4.7223 -
mean_absolute_error: 1.7013 - val_loss
: 7.6315 - val_mean_absolute_error: 2.
1956
1951 Epoch 950/10000
1952 - 14s - loss: 4.7223 -
mean_absolute_error: 1.7015 - val_loss
: 7.6316 - val_mean_absolute_error: 2.
1954
1953 Epoch 951/10000
1954 - 14s - loss: 4.7222 -
mean_absolute_error: 1.7011 - val_loss
: 7.6313 - val_mean_absolute_error: 2.
1957
1955 Epoch 952/10000
1956 - 14s - loss: 4.7222 -
mean_absolute_error: 1.7015 - val_loss
: 7.6314 - val_mean_absolute_error: 2.
1955
1957 Epoch 953/10000
1958 - 14s - loss: 4.7220 -
```

```
1958 mean_absolute_error: 1.7016 - val_loss
    : 7.6313 - val_mean_absolute_error: 2.
1955
1959 Epoch 954/10000
1960   - 14s - loss: 4.7221 -
    mean_absolute_error: 1.7017 - val_loss
    : 7.6315 - val_mean_absolute_error: 2.
1955
1961 Epoch 955/10000
1962   - 14s - loss: 4.7221 -
    mean_absolute_error: 1.7012 - val_loss
    : 7.6314 - val_mean_absolute_error: 2.
1955
1963 Epoch 956/10000
1964   - 14s - loss: 4.7220 -
    mean_absolute_error: 1.7015 - val_loss
    : 7.6314 - val_mean_absolute_error: 2.
1955
1965 Epoch 957/10000
1966   - 14s - loss: 4.7220 -
    mean_absolute_error: 1.7010 - val_loss
    : 7.6314 - val_mean_absolute_error: 2.
1955
1967 Epoch 958/10000
```

```
1968 - 14s - loss: 4.7220 -  
mean_absolute_error: 1.7014 - val_loss  
: 7.6310 - val_mean_absolute_error: 2.  
1956  
1969 Epoch 959/10000  
1970 - 14s - loss: 4.7219 -  
mean_absolute_error: 1.7015 - val_loss  
: 7.6308 - val_mean_absolute_error: 2.  
1957  
1971 Epoch 960/10000  
1972 - 14s - loss: 4.7219 -  
mean_absolute_error: 1.7019 - val_loss  
: 7.6312 - val_mean_absolute_error: 2.  
1957  
1973 Epoch 961/10000  
1974 - 14s - loss: 4.7219 -  
mean_absolute_error: 1.7011 - val_loss  
: 7.6313 - val_mean_absolute_error: 2.  
1958  
1975 Epoch 962/10000  
1976 - 14s - loss: 4.7218 -  
mean_absolute_error: 1.7023 - val_loss  
: 7.6313 - val_mean_absolute_error: 2.  
1954
```

```
1977 Epoch 963/10000
1978   - 14s - loss: 4.7218 -
      mean_absolute_error: 1.7010 - val_loss
      : 7.6314 - val_mean_absolute_error: 2.
      1958
1979 Epoch 964/10000
1980   - 14s - loss: 4.7217 -
      mean_absolute_error: 1.7010 - val_loss
      : 7.6314 - val_mean_absolute_error: 2.
      1958
1981 Epoch 965/10000
1982   - 14s - loss: 4.7217 -
      mean_absolute_error: 1.7017 - val_loss
      : 7.6313 - val_mean_absolute_error: 2.
      1957
1983 Epoch 966/10000
1984   - 14s - loss: 4.7216 -
      mean_absolute_error: 1.7015 - val_loss
      : 7.6312 - val_mean_absolute_error: 2.
      1959
1985 Epoch 967/10000
1986   - 14s - loss: 4.7217 -
      mean_absolute_error: 1.7016 - val_loss
      : 7.6313 - val_mean_absolute_error: 2.
```

```
1986 1957
1987 Epoch 968/10000
1988 - 14s - loss: 4.7218 -
      mean_absolute_error: 1.7019 - val_loss
      : 7.6312 - val_mean_absolute_error: 2.
1957
1989 Epoch 969/10000
1990 - 14s - loss: 4.7214 -
      mean_absolute_error: 1.7013 - val_loss
      : 7.6313 - val_mean_absolute_error: 2.
1960
1991 Epoch 970/10000
1992 - 13s - loss: 4.7216 -
      mean_absolute_error: 1.7020 - val_loss
      : 7.6313 - val_mean_absolute_error: 2.
1957
1993 Epoch 971/10000
1994 - 14s - loss: 4.7215 -
      mean_absolute_error: 1.7018 - val_loss
      : 7.6312 - val_mean_absolute_error: 2.
1955
1995 Epoch 972/10000
1996 - 14s - loss: 4.7214 -
      mean_absolute_error: 1.7011 - val_loss
```

```

1996 : 7.6313 - val_mean_absolute_error: 2.
1957
1997 Epoch 973/10000
1998 - 14s - loss: 4.7215 -
mean_absolute_error: 1.7016 - val_loss
: 7.6315 - val_mean_absolute_error: 2.
1957
1999 Epoch 974/10000
2000 - 14s - loss: 4.7212 -
mean_absolute_error: 1.7020 - val_loss
: 7.6317 - val_mean_absolute_error: 2.
1954
2001 Epoch 975/10000
2002 - 14s - loss: 4.7213 -
mean_absolute_error: 1.7012 - val_loss
: 7.6315 - val_mean_absolute_error: 2.
1955
2003 Epoch 976/10000
2004 - 13s - loss: 4.7211 -
mean_absolute_error: 1.7014 - val_loss
: 7.6317 - val_mean_absolute_error: 2.
1954
2005 Epoch 977/10000
2006 - 13s - loss: 4.7213 -

```

```
2006 mean_absolute_error: 1.7008 - val_loss
    : 7.6321 - val_mean_absolute_error: 2.
1954
2007 Epoch 978/10000
2008   - 14s - loss: 4.7212 -
    mean_absolute_error: 1.7008 - val_loss
    : 7.6321 - val_mean_absolute_error: 2.
1957
2009 Epoch 979/10000
2010   - 14s - loss: 4.7212 -
    mean_absolute_error: 1.7012 - val_loss
    : 7.6321 - val_mean_absolute_error: 2.
1957
2011 Epoch 980/10000
2012   - 14s - loss: 4.7212 -
    mean_absolute_error: 1.7011 - val_loss
    : 7.6321 - val_mean_absolute_error: 2.
1958
2013 Epoch 981/10000
2014   - 14s - loss: 4.7212 -
    mean_absolute_error: 1.7011 - val_loss
    : 7.6323 - val_mean_absolute_error: 2.
1957
2015 Epoch 982/10000
```



```
2016 - 14s - loss: 4.7210 -  
mean_absolute_error: 1.7015 - val_loss  
: 7.6322 - val_mean_absolute_error: 2.  
1957  
2017 Epoch 983/10000  
2018 - 13s - loss: 4.7212 -  
mean_absolute_error: 1.7012 - val_loss  
: 7.6323 - val_mean_absolute_error: 2.  
1957  
2019 Epoch 984/10000  
2020 - 14s - loss: 4.7210 -  
mean_absolute_error: 1.7012 - val_loss  
: 7.6327 - val_mean_absolute_error: 2.  
1958  
2021 Epoch 985/10000  
2022 - 14s - loss: 4.7209 -  
mean_absolute_error: 1.7010 - val_loss  
: 7.6325 - val_mean_absolute_error: 2.  
1959  
2023 Epoch 986/10000  
2024 - 13s - loss: 4.7208 -  
mean_absolute_error: 1.7017 - val_loss  
: 7.6325 - val_mean_absolute_error: 2.  
1956
```

```
2025 Epoch 987/10000
2026   - 14s - loss: 4.7210 -
      mean_absolute_error: 1.7009 - val_loss
      : 7.6323 - val_mean_absolute_error: 2.
      1956
2027 Epoch 988/10000
2028   - 14s - loss: 4.7209 -
      mean_absolute_error: 1.7013 - val_loss
      : 7.6324 - val_mean_absolute_error: 2.
      1957
2029 Epoch 989/10000
2030   - 14s - loss: 4.7211 -
      mean_absolute_error: 1.7005 - val_loss
      : 7.6326 - val_mean_absolute_error: 2.
      1956
2031 Epoch 990/10000
2032   - 14s - loss: 4.7209 -
      mean_absolute_error: 1.7011 - val_loss
      : 7.6324 - val_mean_absolute_error: 2.
      1956
2033 Epoch 991/10000
2034   - 14s - loss: 4.7208 -
      mean_absolute_error: 1.7007 - val_loss
      : 7.6323 - val_mean_absolute_error: 2.
```

```
2034 1957
2035 Epoch 992/10000
2036   - 14s - loss: 4.7208 -
      mean_absolute_error: 1.7011 - val_loss
      : 7.6328 - val_mean_absolute_error: 2.
1958
2037 Epoch 993/10000
2038   - 14s - loss: 4.7206 -
      mean_absolute_error: 1.7004 - val_loss
      : 7.6330 - val_mean_absolute_error: 2.
1962
2039 Epoch 994/10000
2040   - 14s - loss: 4.7206 -
      mean_absolute_error: 1.7013 - val_loss
      : 7.6328 - val_mean_absolute_error: 2.
1960
2041 Epoch 995/10000
2042   - 14s - loss: 4.7206 -
      mean_absolute_error: 1.7013 - val_loss
      : 7.6326 - val_mean_absolute_error: 2.
1959
2043 Epoch 996/10000
2044   - 14s - loss: 4.7206 -
      mean_absolute_error: 1.7015 - val_loss
```

```
2044 : 7.6328 - val_mean_absolute_error: 2.
1957
2045 Epoch 997/10000
2046 - 14s - loss: 4.7203 -
mean_absolute_error: 1.7015 - val_loss
: 7.6331 - val_mean_absolute_error: 2.
1952
2047 Epoch 998/10000
2048 - 14s - loss: 4.7206 -
mean_absolute_error: 1.7006 - val_loss
: 7.6333 - val_mean_absolute_error: 2.
1951
2049 Epoch 999/10000
2050 - 13s - loss: 4.7205 -
mean_absolute_error: 1.6999 - val_loss
: 7.6327 - val_mean_absolute_error: 2.
1955
2051 Epoch 1000/10000
2052 - 14s - loss: 4.7206 -
mean_absolute_error: 1.7005 - val_loss
: 7.6328 - val_mean_absolute_error: 2.
1957
2053 Epoch 1001/10000
2054 - 14s - loss: 4.7204 -
```

```
2054 mean_absolute_error: 1.7012 - val_loss
    : 7.6326 - val_mean_absolute_error: 2.
1956
2055 Epoch 1002/10000
2056   - 14s - loss: 4.7204 -
    mean_absolute_error: 1.7012 - val_loss
    : 7.6327 - val_mean_absolute_error: 2.
1954
2057 Epoch 1003/10000
2058   - 14s - loss: 4.7204 -
    mean_absolute_error: 1.7006 - val_loss
    : 7.6327 - val_mean_absolute_error: 2.
1957
2059 Epoch 1004/10000
2060   - 14s - loss: 4.7203 -
    mean_absolute_error: 1.7007 - val_loss
    : 7.6328 - val_mean_absolute_error: 2.
1959
2061 Epoch 1005/10000
2062   - 14s - loss: 4.7203 -
    mean_absolute_error: 1.7011 - val_loss
    : 7.6332 - val_mean_absolute_error: 2.
1959
2063 Epoch 1006/10000
```

```
2064 - 14s - loss: 4.7202 -  
mean_absolute_error: 1.7010 - val_loss  
: 7.6333 - val_mean_absolute_error: 2.  
1958  
2065 Epoch 1007/10000  
2066 - 14s - loss: 4.7203 -  
mean_absolute_error: 1.7011 - val_loss  
: 7.6335 - val_mean_absolute_error: 2.  
1960  
2067 Epoch 1008/10000  
2068 - 14s - loss: 4.7202 -  
mean_absolute_error: 1.7007 - val_loss  
: 7.6337 - val_mean_absolute_error: 2.  
1961  
2069 Epoch 1009/10000  
2070 - 13s - loss: 4.7202 -  
mean_absolute_error: 1.7014 - val_loss  
: 7.6336 - val_mean_absolute_error: 2.  
1959  
2071 Epoch 1010/10000  
2072 - 14s - loss: 4.7202 -  
mean_absolute_error: 1.7006 - val_loss  
: 7.6336 - val_mean_absolute_error: 2.  
1958
```

```
2073 Epoch 1011/10000
2074   - 14s - loss: 4.7200 -
      mean_absolute_error: 1.7005 - val_loss
      : 7.6336 - val_mean_absolute_error: 2.
      1959
2075 Epoch 1012/10000
2076   - 14s - loss: 4.7201 -
      mean_absolute_error: 1.7009 - val_loss
      : 7.6335 - val_mean_absolute_error: 2.
      1961
2077 Epoch 1013/10000
2078   - 14s - loss: 4.7200 -
      mean_absolute_error: 1.7009 - val_loss
      : 7.6336 - val_mean_absolute_error: 2.
      1960
2079 Epoch 1014/10000
2080   - 14s - loss: 4.7201 -
      mean_absolute_error: 1.7008 - val_loss
      : 7.6334 - val_mean_absolute_error: 2.
      1961
2081 Epoch 1015/10000
2082   - 14s - loss: 4.7199 -
      mean_absolute_error: 1.7015 - val_loss
      : 7.6335 - val_mean_absolute_error: 2.
```

```
2082 1960
2083 Epoch 1016/10000
2084   - 13s - loss: 4.7199 -
      mean_absolute_error: 1.7008 - val_loss
      : 7.6334 - val_mean_absolute_error: 2.
      1960
2085 Epoch 1017/10000
2086   - 14s - loss: 4.7197 -
      mean_absolute_error: 1.7007 - val_loss
      : 7.6335 - val_mean_absolute_error: 2.
      1961
2087 Epoch 1018/10000
2088   - 14s - loss: 4.7199 -
      mean_absolute_error: 1.7013 - val_loss
      : 7.6337 - val_mean_absolute_error: 2.
      1961
2089 Epoch 1019/10000
2090   - 14s - loss: 4.7197 -
      mean_absolute_error: 1.7011 - val_loss
      : 7.6334 - val_mean_absolute_error: 2.
      1958
2091 Epoch 1020/10000
2092   - 14s - loss: 4.7197 -
      mean_absolute_error: 1.7011 - val_loss
```



```
2092 : 7.6339 - val_mean_absolute_error: 2.
1955
2093 Epoch 1021/10000
2094 - 14s - loss: 4.7197 -
mean_absolute_error: 1.7007 - val_loss
: 7.6338 - val_mean_absolute_error: 2.
1955
2095 Epoch 1022/10000
2096 - 14s - loss: 4.7199 -
mean_absolute_error: 1.7003 - val_loss
: 7.6336 - val_mean_absolute_error: 2.
1957
2097 Epoch 1023/10000
2098 - 14s - loss: 4.7192 -
mean_absolute_error: 1.7001 - val_loss
: 7.6336 - val_mean_absolute_error: 2.
1963
2099 Epoch 1024/10000
2100 - 14s - loss: 4.7196 -
mean_absolute_error: 1.7017 - val_loss
: 7.6339 - val_mean_absolute_error: 2.
1961
2101 Epoch 1025/10000
2102 - 14s - loss: 4.7196 -
```

```
2102 mean_absolute_error: 1.7010 - val_loss
    : 7.6336 - val_mean_absolute_error: 2.
1960
2103 Epoch 1026/10000
2104   - 14s - loss: 4.7193 -
    mean_absolute_error: 1.7014 - val_loss
    : 7.6338 - val_mean_absolute_error: 2.
1955
2105 Epoch 1027/10000
2106   - 14s - loss: 4.7196 -
    mean_absolute_error: 1.7006 - val_loss
    : 7.6336 - val_mean_absolute_error: 2.
1957
2107 Epoch 1028/10000
2108   - 14s - loss: 4.7193 -
    mean_absolute_error: 1.7007 - val_loss
    : 7.6337 - val_mean_absolute_error: 2.
1957
2109 Epoch 1029/10000
2110   - 14s - loss: 4.7192 -
    mean_absolute_error: 1.7011 - val_loss
    : 7.6339 - val_mean_absolute_error: 2.
1955
2111 Epoch 1030/10000
```

```
2112 - 13s - loss: 4.7194 -  
mean_absolute_error: 1.7003 - val_loss  
: 7.6339 - val_mean_absolute_error: 2.  
1956  
2113 Epoch 1031/10000  
2114 - 14s - loss: 4.7194 -  
mean_absolute_error: 1.7000 - val_loss  
: 7.6341 - val_mean_absolute_error: 2.  
1960  
2115 Epoch 1032/10000  
2116 - 13s - loss: 4.7193 -  
mean_absolute_error: 1.7010 - val_loss  
: 7.6341 - val_mean_absolute_error: 2.  
1960  
2117 Epoch 1033/10000  
2118 - 13s - loss: 4.7193 -  
mean_absolute_error: 1.7008 - val_loss  
: 7.6341 - val_mean_absolute_error: 2.  
1961  
2119 Epoch 1034/10000  
2120 - 13s - loss: 4.7193 -  
mean_absolute_error: 1.7009 - val_loss  
: 7.6340 - val_mean_absolute_error: 2.  
1961
```

```
2121 Epoch 1035/10000
2122   - 13s - loss: 4.7191 -
      mean_absolute_error: 1.7001 - val_loss
      : 7.6342 - val_mean_absolute_error: 2.
      1964
2123 Epoch 1036/10000
2124   - 13s - loss: 4.7191 -
      mean_absolute_error: 1.7010 - val_loss
      : 7.6340 - val_mean_absolute_error: 2.
      1965
2125 Epoch 1037/10000
2126   - 13s - loss: 4.7192 -
      mean_absolute_error: 1.7014 - val_loss
      : 7.6343 - val_mean_absolute_error: 2.
      1963
2127 Epoch 1038/10000
2128   - 13s - loss: 4.7188 -
      mean_absolute_error: 1.7017 - val_loss
      : 7.6347 - val_mean_absolute_error: 2.
      1960
2129 Epoch 1039/10000
2130   - 13s - loss: 4.7190 -
      mean_absolute_error: 1.7006 - val_loss
      : 7.6350 - val_mean_absolute_error: 2.
```

```
2130 1961
2131 Epoch 1040/10000
2132   - 14s - loss: 4.7190 -
      mean_absolute_error: 1.7008 - val_loss
      : 7.6349 - val_mean_absolute_error: 2.
      1961
2133 Epoch 1041/10000
2134   - 13s - loss: 4.7189 -
      mean_absolute_error: 1.7005 - val_loss
      : 7.6347 - val_mean_absolute_error: 2.
      1966
2135 Epoch 1042/10000
2136   - 13s - loss: 4.7190 -
      mean_absolute_error: 1.7012 - val_loss
      : 7.6344 - val_mean_absolute_error: 2.
      1965
2137 Epoch 1043/10000
2138   - 13s - loss: 4.7190 -
      mean_absolute_error: 1.7013 - val_loss
      : 7.6343 - val_mean_absolute_error: 2.
      1962
2139 Epoch 1044/10000
2140   - 14s - loss: 4.7188 -
      mean_absolute_error: 1.7012 - val_loss
```

```
2140 : 7.6345 - val_mean_absolute_error: 2.
1960
2141 Epoch 1045/10000
2142 - 13s - loss: 4.7189 -
mean_absolute_error: 1.7007 - val_loss
: 7.6345 - val_mean_absolute_error: 2.
1959
2143 Epoch 1046/10000
2144 - 14s - loss: 4.7189 -
mean_absolute_error: 1.7002 - val_loss
: 7.6341 - val_mean_absolute_error: 2.
1961
2145 Epoch 1047/10000
2146 - 13s - loss: 4.7187 -
mean_absolute_error: 1.7008 - val_loss
: 7.6344 - val_mean_absolute_error: 2.
1962
2147 Epoch 1048/10000
2148 - 13s - loss: 4.7187 -
mean_absolute_error: 1.7010 - val_loss
: 7.6344 - val_mean_absolute_error: 2.
1962
2149 Epoch 1049/10000
2150 - 14s - loss: 4.7187 -
```

```
2150 mean_absolute_error: 1.7008 - val_loss
    : 7.6344 - val_mean_absolute_error: 2.
1962
2151 Epoch 1050/10000
2152   - 14s - loss: 4.7187 -
    mean_absolute_error: 1.7008 - val_loss
    : 7.6340 - val_mean_absolute_error: 2.
1962
2153 Epoch 1051/10000
2154   - 13s - loss: 4.7186 -
    mean_absolute_error: 1.7005 - val_loss
    : 7.6337 - val_mean_absolute_error: 2.
1963
2155 Epoch 1052/10000
2156   - 13s - loss: 4.7186 -
    mean_absolute_error: 1.7011 - val_loss
    : 7.6339 - val_mean_absolute_error: 2.
1963
2157 Epoch 1053/10000
2158   - 13s - loss: 4.7186 -
    mean_absolute_error: 1.7010 - val_loss
    : 7.6341 - val_mean_absolute_error: 2.
1961
2159 Epoch 1054/10000
```

```
2160 - 13s - loss: 4.7185 -  
mean_absolute_error: 1.7011 - val_loss  
: 7.6341 - val_mean_absolute_error: 2.  
1958  
2161 Epoch 1055/10000  
2162 - 13s - loss: 4.7185 -  
mean_absolute_error: 1.7007 - val_loss  
: 7.6338 - val_mean_absolute_error: 2.  
1958  
2163 Epoch 1056/10000  
2164 - 13s - loss: 4.7186 -  
mean_absolute_error: 1.7004 - val_loss  
: 7.6339 - val_mean_absolute_error: 2.  
1960  
2165 Epoch 1057/10000  
2166 - 13s - loss: 4.7185 -  
mean_absolute_error: 1.7009 - val_loss  
: 7.6339 - val_mean_absolute_error: 2.  
1959  
2167 Epoch 1058/10000  
2168 - 13s - loss: 4.7184 -  
mean_absolute_error: 1.7010 - val_loss  
: 7.6341 - val_mean_absolute_error: 2.  
1956
```



```
2169 Epoch 1059/10000
2170   - 13s - loss: 4.7184 -
      mean_absolute_error: 1.7001 - val_loss
      : 7.6340 - val_mean_absolute_error: 2.
      1961
2171 Epoch 1060/10000
2172   - 13s - loss: 4.7183 -
      mean_absolute_error: 1.7010 - val_loss
      : 7.6339 - val_mean_absolute_error: 2.
      1960
2173 Epoch 1061/10000
2174   - 13s - loss: 4.7184 -
      mean_absolute_error: 1.7009 - val_loss
      : 7.6344 - val_mean_absolute_error: 2.
      1960
2175 Epoch 1062/10000
2176   - 13s - loss: 4.7183 -
      mean_absolute_error: 1.7010 - val_loss
      : 7.6345 - val_mean_absolute_error: 2.
      1958
2177 Epoch 1063/10000
2178   - 13s - loss: 4.7181 -
      mean_absolute_error: 1.7011 - val_loss
      : 7.6342 - val_mean_absolute_error: 2.
```

```
2178 1957
2179 Epoch 1064/10000
2180   - 13s - loss: 4.7184 -
      mean_absolute_error: 1.7001 - val_loss
      : 7.6343 - val_mean_absolute_error: 2.
1958
2181 Epoch 1065/10000
2182   - 13s - loss: 4.7182 -
      mean_absolute_error: 1.7004 - val_loss
      : 7.6343 - val_mean_absolute_error: 2.
1959
2183 Epoch 1066/10000
2184   - 14s - loss: 4.7181 -
      mean_absolute_error: 1.7004 - val_loss
      : 7.6344 - val_mean_absolute_error: 2.
1962
2185 Epoch 1067/10000
2186   - 14s - loss: 4.7182 -
      mean_absolute_error: 1.7010 - val_loss
      : 7.6342 - val_mean_absolute_error: 2.
1963
2187 Epoch 1068/10000
2188   - 13s - loss: 4.7180 -
      mean_absolute_error: 1.7009 - val_loss
```

```
2188 : 7.6342 - val_mean_absolute_error: 2.
1961
2189 Epoch 1069/10000
2190 - 13s - loss: 4.7180 -
mean_absolute_error: 1.7006 - val_loss
: 7.6342 - val_mean_absolute_error: 2.
1962
2191 Epoch 1070/10000
2192 - 13s - loss: 4.7177 -
mean_absolute_error: 1.7004 - val_loss
: 7.6339 - val_mean_absolute_error: 2.
1964
2193 Epoch 1071/10000
2194 - 13s - loss: 4.7179 -
mean_absolute_error: 1.7013 - val_loss
: 7.6344 - val_mean_absolute_error: 2.
1961
2195 Epoch 1072/10000
2196 - 13s - loss: 4.7179 -
mean_absolute_error: 1.7003 - val_loss
: 7.6343 - val_mean_absolute_error: 2.
1961
2197 Epoch 1073/10000
2198 - 13s - loss: 4.7178 -
```

```
2198 mean_absolute_error: 1.7005 - val_loss
    : 7.6342 - val_mean_absolute_error: 2.
1963
2199 Epoch 1074/10000
2200   - 13s - loss: 4.7175 -
    mean_absolute_error: 1.7013 - val_loss
    : 7.6344 - val_mean_absolute_error: 2.
1957
2201 Epoch 1075/10000
2202   - 13s - loss: 4.7179 -
    mean_absolute_error: 1.7005 - val_loss
    : 7.6345 - val_mean_absolute_error: 2.
1958
2203 Epoch 1076/10000
2204   - 13s - loss: 4.7177 -
    mean_absolute_error: 1.7004 - val_loss
    : 7.6346 - val_mean_absolute_error: 2.
1960
2205 Epoch 1077/10000
2206   - 13s - loss: 4.7177 -
    mean_absolute_error: 1.7009 - val_loss
    : 7.6347 - val_mean_absolute_error: 2.
1961
2207 Epoch 1078/10000
```

```
2208 - 13s - loss: 4.7177 -  
mean_absolute_error: 1.7002 - val_loss  
: 7.6350 - val_mean_absolute_error: 2.  
1962  
2209 Epoch 1079/10000  
2210 - 13s - loss: 4.7176 -  
mean_absolute_error: 1.7004 - val_loss  
: 7.6346 - val_mean_absolute_error: 2.  
1961  
2211 Epoch 1080/10000  
2212 - 14s - loss: 4.7175 -  
mean_absolute_error: 1.7008 - val_loss  
: 7.6345 - val_mean_absolute_error: 2.  
1960  
2213 Epoch 1081/10000  
2214 - 14s - loss: 4.7175 -  
mean_absolute_error: 1.6996 - val_loss  
: 7.6346 - val_mean_absolute_error: 2.  
1964  
2215 Epoch 1082/10000  
2216 - 13s - loss: 4.7175 -  
mean_absolute_error: 1.7009 - val_loss  
: 7.6347 - val_mean_absolute_error: 2.  
1963
```

```
2217 Epoch 1083/10000
2218   - 13s - loss: 4.7174 -
      mean_absolute_error: 1.7011 - val_loss
      : 7.6346 - val_mean_absolute_error: 2.
      1961
2219 Epoch 1084/10000
2220   - 13s - loss: 4.7174 -
      mean_absolute_error: 1.7006 - val_loss
      : 7.6346 - val_mean_absolute_error: 2.
      1960
2221 Epoch 1085/10000
2222   - 13s - loss: 4.7175 -
      mean_absolute_error: 1.6999 - val_loss
      : 7.6348 - val_mean_absolute_error: 2.
      1963
2223 Epoch 1086/10000
2224   - 13s - loss: 4.7172 -
      mean_absolute_error: 1.7012 - val_loss
      : 7.6348 - val_mean_absolute_error: 2.
      1959
2225 Epoch 1087/10000
2226   - 13s - loss: 4.7175 -
      mean_absolute_error: 1.7004 - val_loss
      : 7.6348 - val_mean_absolute_error: 2.
```

```
2226 1962
2227 Epoch 1088/10000
2228   - 13s - loss: 4.7173 -
      mean_absolute_error: 1.7013 - val_loss
      : 7.6350 - val_mean_absolute_error: 2.
      1960
2229 Epoch 1089/10000
2230   - 13s - loss: 4.7172 -
      mean_absolute_error: 1.7002 - val_loss
      : 7.6348 - val_mean_absolute_error: 2.
      1964
2231 Epoch 1090/10000
2232   - 13s - loss: 4.7172 -
      mean_absolute_error: 1.7010 - val_loss
      : 7.6347 - val_mean_absolute_error: 2.
      1962
2233 Epoch 1091/10000
2234   - 13s - loss: 4.7173 -
      mean_absolute_error: 1.7004 - val_loss
      : 7.6347 - val_mean_absolute_error: 2.
      1962
2235 Epoch 1092/10000
2236   - 13s - loss: 4.7171 -
      mean_absolute_error: 1.7007 - val_loss
```

```
2236 : 7.6348 - val_mean_absolute_error: 2.  
1961  
2237 Epoch 1093/10000  
2238 - 13s - loss: 4.7172 -  
mean_absolute_error: 1.7006 - val_loss  
: 7.6351 - val_mean_absolute_error: 2.  
1959  
2239 Epoch 1094/10000  
2240 - 13s - loss: 4.7171 -  
mean_absolute_error: 1.7003 - val_loss  
: 7.6348 - val_mean_absolute_error: 2.  
1960  
2241 Epoch 1095/10000  
2242 - 13s - loss: 4.7171 -  
mean_absolute_error: 1.7003 - val_loss  
: 7.6348 - val_mean_absolute_error: 2.  
1960  
2243 Epoch 1096/10000  
2244 - 13s - loss: 4.7171 -  
mean_absolute_error: 1.7004 - val_loss  
: 7.6349 - val_mean_absolute_error: 2.  
1960  
2245 Epoch 1097/10000  
2246 - 13s - loss: 4.7169 -
```



```
2246 mean_absolute_error: 1.7002 - val_loss
    : 7.6348 - val_mean_absolute_error: 2.
1963
2247 Epoch 1098/10000
2248   - 13s - loss: 4.7169 -
    mean_absolute_error: 1.7008 - val_loss
    : 7.6351 - val_mean_absolute_error: 2.
1961
2249 Epoch 1099/10000
2250   - 13s - loss: 4.7169 -
    mean_absolute_error: 1.7001 - val_loss
    : 7.6351 - val_mean_absolute_error: 2.
1961
2251 Epoch 1100/10000
2252   - 13s - loss: 4.7170 -
    mean_absolute_error: 1.7002 - val_loss
    : 7.6351 - val_mean_absolute_error: 2.
1960
2253 Epoch 1101/10000
2254   - 13s - loss: 4.7169 -
    mean_absolute_error: 1.7002 - val_loss
    : 7.6350 - val_mean_absolute_error: 2.
1960
2255 Epoch 1102/10000
```

```
2256 - 13s - loss: 4.7166 -  
mean_absolute_error: 1.7008 - val_loss  
: 7.6348 - val_mean_absolute_error: 2.  
1958  
2257 Epoch 1103/10000  
2258 - 13s - loss: 4.7169 -  
mean_absolute_error: 1.7000 - val_loss  
: 7.6346 - val_mean_absolute_error: 2.  
1960  
2259 Epoch 1104/10000  
2260 - 13s - loss: 4.7169 -  
mean_absolute_error: 1.6998 - val_loss  
: 7.6351 - val_mean_absolute_error: 2.  
1962  
2261 Epoch 1105/10000  
2262 - 13s - loss: 4.7168 -  
mean_absolute_error: 1.7005 - val_loss  
: 7.6352 - val_mean_absolute_error: 2.  
1963  
2263 Epoch 1106/10000  
2264 - 13s - loss: 4.7167 -  
mean_absolute_error: 1.7005 - val_loss  
: 7.6351 - val_mean_absolute_error: 2.  
1962
```

```
2265 Epoch 1107/10000
2266   - 13s - loss: 4.7166 -
      mean_absolute_error: 1.7008 - val_loss
      : 7.6354 - val_mean_absolute_error: 2.
      1961
2267 Epoch 1108/10000
2268   - 13s - loss: 4.7166 -
      mean_absolute_error: 1.7003 - val_loss
      : 7.6353 - val_mean_absolute_error: 2.
      1961
2269 Epoch 1109/10000
2270   - 13s - loss: 4.7165 -
      mean_absolute_error: 1.7007 - val_loss
      : 7.6353 - val_mean_absolute_error: 2.
      1961
2271 Epoch 1110/10000
2272   - 13s - loss: 4.7165 -
      mean_absolute_error: 1.7005 - val_loss
      : 7.6354 - val_mean_absolute_error: 2.
      1961
2273 Epoch 1111/10000
2274   - 14s - loss: 4.7165 -
      mean_absolute_error: 1.7001 - val_loss
      : 7.6350 - val_mean_absolute_error: 2.
```

```
2274 1959
2275 Epoch 1112/10000
2276   - 13s - loss: 4.7165 -
      mean_absolute_error: 1.7003 - val_loss
      : 7.6351 - val_mean_absolute_error: 2.
      1956
2277 Epoch 1113/10000
2278   - 14s - loss: 4.7165 -
      mean_absolute_error: 1.7002 - val_loss
      : 7.6350 - val_mean_absolute_error: 2.
      1957
2279 Epoch 1114/10000
2280   - 13s - loss: 4.7164 -
      mean_absolute_error: 1.6997 - val_loss
      : 7.6349 - val_mean_absolute_error: 2.
      1960
2281 Epoch 1115/10000
2282   - 13s - loss: 4.7163 -
      mean_absolute_error: 1.7006 - val_loss
      : 7.6352 - val_mean_absolute_error: 2.
      1958
2283 Epoch 1116/10000
2284   - 13s - loss: 4.7159 -
      mean_absolute_error: 1.7007 - val_loss
```

```
2284 : 7.6358 - val_mean_absolute_error: 2.
1954
2285 Epoch 1117/10000
2286 - 13s - loss: 4.7163 -
mean_absolute_error: 1.6987 - val_loss
: 7.6354 - val_mean_absolute_error: 2.
1962
2287 Epoch 1118/10000
2288 - 14s - loss: 4.7162 -
mean_absolute_error: 1.7003 - val_loss
: 7.6351 - val_mean_absolute_error: 2.
1961
2289 Epoch 1119/10000
2290 - 14s - loss: 4.7162 -
mean_absolute_error: 1.7002 - val_loss
: 7.6352 - val_mean_absolute_error: 2.
1962
2291 Epoch 1120/10000
2292 - 14s - loss: 4.7161 -
mean_absolute_error: 1.7005 - val_loss
: 7.6352 - val_mean_absolute_error: 2.
1959
2293 Epoch 1121/10000
2294 - 14s - loss: 4.7164 -
```

```
2294 mean_absolute_error: 1.6997 - val_loss
    : 7.6355 - val_mean_absolute_error: 2.
1958
2295 Epoch 1122/10000
2296   - 14s - loss: 4.7161 -
    mean_absolute_error: 1.6997 - val_loss
    : 7.6354 - val_mean_absolute_error: 2.
1962
2297 Epoch 1123/10000
2298   - 14s - loss: 4.7161 -
    mean_absolute_error: 1.6999 - val_loss
    : 7.6354 - val_mean_absolute_error: 2.
1961
2299 Epoch 1124/10000
2300   - 13s - loss: 4.7160 -
    mean_absolute_error: 1.7005 - val_loss
    : 7.6354 - val_mean_absolute_error: 2.
1960
2301 Epoch 1125/10000
2302   - 14s - loss: 4.7160 -
    mean_absolute_error: 1.7003 - val_loss
    : 7.6355 - val_mean_absolute_error: 2.
1961
2303 Epoch 1126/10000
```

```
2304 - 13s - loss: 4.7160 -  
mean_absolute_error: 1.6997 - val_loss  
: 7.6355 - val_mean_absolute_error: 2.  
1962  
2305 Epoch 1127/10000  
2306 - 14s - loss: 4.7158 -  
mean_absolute_error: 1.7008 - val_loss  
: 7.6355 - val_mean_absolute_error: 2.  
1961  
2307 Epoch 1128/10000  
2308 - 14s - loss: 4.7159 -  
mean_absolute_error: 1.7001 - val_loss  
: 7.6357 - val_mean_absolute_error: 2.  
1961  
2309 Epoch 1129/10000  
2310 - 13s - loss: 4.7158 -  
mean_absolute_error: 1.7004 - val_loss  
: 7.6358 - val_mean_absolute_error: 2.  
1960  
2311 Epoch 1130/10000  
2312 - 13s - loss: 4.7158 -  
mean_absolute_error: 1.6999 - val_loss  
: 7.6358 - val_mean_absolute_error: 2.  
1958
```

```
2313 Epoch 1131/10000
2314   - 13s - loss: 4.7157 -
      mean_absolute_error: 1.7002 - val_loss
      : 7.6360 - val_mean_absolute_error: 2.
      1960
2315 Epoch 1132/10000
2316   - 13s - loss: 4.7158 -
      mean_absolute_error: 1.6999 - val_loss
      : 7.6360 - val_mean_absolute_error: 2.
      1961
2317 Epoch 1133/10000
2318   - 13s - loss: 4.7157 -
      mean_absolute_error: 1.6998 - val_loss
      : 7.6358 - val_mean_absolute_error: 2.
      1961
2319 Epoch 1134/10000
2320   - 13s - loss: 4.7157 -
      mean_absolute_error: 1.7001 - val_loss
      : 7.6364 - val_mean_absolute_error: 2.
      1961
2321 Epoch 1135/10000
2322   - 13s - loss: 4.7156 -
      mean_absolute_error: 1.6999 - val_loss
      : 7.6363 - val_mean_absolute_error: 2.
```



```
2322 1962
2323 Epoch 1136/10000
2324   - 13s - loss: 4.7156 -
      mean_absolute_error: 1.6998 - val_loss
      : 7.6360 - val_mean_absolute_error: 2.
      1964
2325 Epoch 1137/10000
2326   - 13s - loss: 4.7155 -
      mean_absolute_error: 1.7003 - val_loss
      : 7.6362 - val_mean_absolute_error: 2.
      1964
2327 Epoch 1138/10000
2328   - 13s - loss: 4.7157 -
      mean_absolute_error: 1.7000 - val_loss
      : 7.6361 - val_mean_absolute_error: 2.
      1960
2329 Epoch 1139/10000
2330   - 13s - loss: 4.7155 -
      mean_absolute_error: 1.6997 - val_loss
      : 7.6359 - val_mean_absolute_error: 2.
      1960
2331 Epoch 1140/10000
2332   - 13s - loss: 4.7155 -
      mean_absolute_error: 1.6996 - val_loss
```

```
2332 : 7.6361 - val_mean_absolute_error: 2.
1963
2333 Epoch 1141/10000
2334 - 13s - loss: 4.7153 -
mean_absolute_error: 1.7006 - val_loss
: 7.6359 - val_mean_absolute_error: 2.
1963
2335 Epoch 1142/10000
2336 - 13s - loss: 4.7154 -
mean_absolute_error: 1.7002 - val_loss
: 7.6356 - val_mean_absolute_error: 2.
1961
2337 Epoch 1143/10000
2338 - 13s - loss: 4.7153 -
mean_absolute_error: 1.7004 - val_loss
: 7.6358 - val_mean_absolute_error: 2.
1960
2339 Epoch 1144/10000
2340 - 13s - loss: 4.7154 -
mean_absolute_error: 1.6995 - val_loss
: 7.6357 - val_mean_absolute_error: 2.
1960
2341 Epoch 1145/10000
2342 - 14s - loss: 4.7154 -
```

```
2342 mean_absolute_error: 1.6999 - val_loss
    : 7.6358 - val_mean_absolute_error: 2.
1962
2343 Epoch 1146/10000
2344   - 13s - loss: 4.7152 -
    mean_absolute_error: 1.6996 - val_loss
    : 7.6356 - val_mean_absolute_error: 2.
1963
2345 Epoch 1147/10000
2346   - 13s - loss: 4.7151 -
    mean_absolute_error: 1.7000 - val_loss
    : 7.6358 - val_mean_absolute_error: 2.
1964
2347 Epoch 1148/10000
2348   - 13s - loss: 4.7152 -
    mean_absolute_error: 1.7005 - val_loss
    : 7.6359 - val_mean_absolute_error: 2.
1961
2349 Epoch 1149/10000
2350   - 14s - loss: 4.7150 -
    mean_absolute_error: 1.6995 - val_loss
    : 7.6360 - val_mean_absolute_error: 2.
1963
2351 Epoch 1150/10000
```

```
2352 - 14s - loss: 4.7152 -  
mean_absolute_error: 1.7004 - val_loss  
: 7.6359 - val_mean_absolute_error: 2.  
1959  
2353 Epoch 1151/10000  
2354 - 13s - loss: 4.7151 -  
mean_absolute_error: 1.6999 - val_loss  
: 7.6361 - val_mean_absolute_error: 2.  
1962  
2355 Epoch 1152/10000  
2356 - 13s - loss: 4.7149 -  
mean_absolute_error: 1.7001 - val_loss  
: 7.6366 - val_mean_absolute_error: 2.  
1961  
2357 Epoch 1153/10000  
2358 - 13s - loss: 4.7150 -  
mean_absolute_error: 1.6997 - val_loss  
: 7.6365 - val_mean_absolute_error: 2.  
1963  
2359 Epoch 1154/10000  
2360 - 13s - loss: 4.7150 -  
mean_absolute_error: 1.7000 - val_loss  
: 7.6370 - val_mean_absolute_error: 2.  
1963
```

```
2361 Epoch 1155/10000
2362   - 13s - loss: 4.7149 -
      mean_absolute_error: 1.6996 - val_loss
      : 7.6369 - val_mean_absolute_error: 2.
      1965
2363 Epoch 1156/10000
2364   - 13s - loss: 4.7149 -
      mean_absolute_error: 1.7000 - val_loss
      : 7.6370 - val_mean_absolute_error: 2.
      1965
2365 Epoch 1157/10000
2366   - 13s - loss: 4.7149 -
      mean_absolute_error: 1.7003 - val_loss
      : 7.6369 - val_mean_absolute_error: 2.
      1966
2367 Epoch 1158/10000
2368   - 13s - loss: 4.7149 -
      mean_absolute_error: 1.7004 - val_loss
      : 7.6371 - val_mean_absolute_error: 2.
      1964
2369 Epoch 1159/10000
2370   - 13s - loss: 4.7147 -
      mean_absolute_error: 1.7000 - val_loss
      : 7.6371 - val_mean_absolute_error: 2.
```

```
2370 1965
2371 Epoch 1160/10000
2372   - 13s - loss: 4.7146 -
      mean_absolute_error: 1.6998 - val_loss
      : 7.6373 - val_mean_absolute_error: 2.
1968
2373 Epoch 1161/10000
2374   - 13s - loss: 4.7145 -
      mean_absolute_error: 1.7009 - val_loss
      : 7.6374 - val_mean_absolute_error: 2.
1966
2375 Epoch 1162/10000
2376   - 13s - loss: 4.7147 -
      mean_absolute_error: 1.7006 - val_loss
      : 7.6374 - val_mean_absolute_error: 2.
1966
2377 Epoch 1163/10000
2378   - 13s - loss: 4.7147 -
      mean_absolute_error: 1.7000 - val_loss
      : 7.6373 - val_mean_absolute_error: 2.
1967
2379 Epoch 1164/10000
2380   - 13s - loss: 4.7147 -
      mean_absolute_error: 1.7004 - val_loss
```

```
2380 : 7.6370 - val_mean_absolute_error: 2.
1967
2381 Epoch 1165/10000
2382 - 13s - loss: 4.7145 -
mean_absolute_error: 1.7005 - val_loss
: 7.6369 - val_mean_absolute_error: 2.
1967
2383 Epoch 1166/10000
2384 - 13s - loss: 4.7146 -
mean_absolute_error: 1.6993 - val_loss
: 7.6364 - val_mean_absolute_error: 2.
1966
2385 Epoch 1167/10000
2386 - 13s - loss: 4.7145 -
mean_absolute_error: 1.7000 - val_loss
: 7.6365 - val_mean_absolute_error: 2.
1963
2387 Epoch 1168/10000
2388 - 13s - loss: 4.7145 -
mean_absolute_error: 1.6996 - val_loss
: 7.6366 - val_mean_absolute_error: 2.
1965
2389 Epoch 1169/10000
2390 - 13s - loss: 4.7142 -
```

2390 mean_absolute_error: 1.7002 - val_loss
: 7.6367 - val_mean_absolute_error: 2.
1962

2391 Epoch 1170/10000

2392 - 13s - loss: 4.7145 -
mean_absolute_error: 1.6998 - val_loss
: 7.6373 - val_mean_absolute_error: 2.
1963

2393 Epoch 1171/10000

2394 - 13s - loss: 4.7143 -
mean_absolute_error: 1.6994 - val_loss
: 7.6373 - val_mean_absolute_error: 2.
1967

2395 Epoch 1172/10000

2396 - 13s - loss: 4.7141 -
mean_absolute_error: 1.7000 - val_loss
: 7.6371 - val_mean_absolute_error: 2.
1968

2397 Epoch 1173/10000

2398 - 13s - loss: 4.7143 -
mean_absolute_error: 1.7007 - val_loss
: 7.6368 - val_mean_absolute_error: 2.
1968

2399 Epoch 1174/10000


```
2400 - 13s - loss: 4.7142 -  
mean_absolute_error: 1.7005 - val_loss  
: 7.6372 - val_mean_absolute_error: 2.  
1969  
2401 Epoch 1175/10000  
2402 - 13s - loss: 4.7142 -  
mean_absolute_error: 1.7005 - val_loss  
: 7.6373 - val_mean_absolute_error: 2.  
1967  
2403 Epoch 1176/10000  
2404 - 13s - loss: 4.7138 -  
mean_absolute_error: 1.7003 - val_loss  
: 7.6375 - val_mean_absolute_error: 2.  
1963  
2405 Epoch 1177/10000  
2406 - 13s - loss: 4.7141 -  
mean_absolute_error: 1.6999 - val_loss  
: 7.6374 - val_mean_absolute_error: 2.  
1965  
2407 Epoch 1178/10000  
2408 - 14s - loss: 4.7140 -  
mean_absolute_error: 1.6999 - val_loss  
: 7.6375 - val_mean_absolute_error: 2.  
1966
```

```
2409 Epoch 1179/10000
2410   - 13s - loss: 4.7139 -
      mean_absolute_error: 1.7009 - val_loss
      : 7.6378 - val_mean_absolute_error: 2.
      1965
2411 Epoch 1180/10000
2412   - 14s - loss: 4.7140 -
      mean_absolute_error: 1.7002 - val_loss
      : 7.6378 - val_mean_absolute_error: 2.
      1965
2413 Epoch 1181/10000
2414   - 13s - loss: 4.7140 -
      mean_absolute_error: 1.6996 - val_loss
      : 7.6377 - val_mean_absolute_error: 2.
      1968
2415 Epoch 1182/10000
2416   - 14s - loss: 4.7137 -
      mean_absolute_error: 1.7006 - val_loss
      : 7.6382 - val_mean_absolute_error: 2.
      1965
2417 Epoch 1183/10000
2418   - 13s - loss: 4.7140 -
      mean_absolute_error: 1.7002 - val_loss
      : 7.6382 - val_mean_absolute_error: 2.
```

```
2418 1965
2419 Epoch 1184/10000
2420   - 13s - loss: 4.7138 -
      mean_absolute_error: 1.6998 - val_loss
      : 7.6380 - val_mean_absolute_error: 2.
1966
2421 Epoch 1185/10000
2422   - 13s - loss: 4.7139 -
      mean_absolute_error: 1.6994 - val_loss
      : 7.6381 - val_mean_absolute_error: 2.
1967
2423 Epoch 1186/10000
2424   - 13s - loss: 4.7138 -
      mean_absolute_error: 1.7004 - val_loss
      : 7.6379 - val_mean_absolute_error: 2.
1966
2425 Epoch 1187/10000
2426   - 13s - loss: 4.7137 -
      mean_absolute_error: 1.7001 - val_loss
      : 7.6377 - val_mean_absolute_error: 2.
1965
2427 Epoch 1188/10000
2428   - 13s - loss: 4.7137 -
      mean_absolute_error: 1.6994 - val_loss
```

```
2428 : 7.6377 - val_mean_absolute_error: 2.
1968
2429 Epoch 1189/10000
2430 - 13s - loss: 4.7137 -
mean_absolute_error: 1.7000 - val_loss
: 7.6377 - val_mean_absolute_error: 2.
1967
2431 Epoch 1190/10000
2432 - 13s - loss: 4.7135 -
mean_absolute_error: 1.6999 - val_loss
: 7.6379 - val_mean_absolute_error: 2.
1971
2433 Epoch 1191/10000
2434 - 13s - loss: 4.7136 -
mean_absolute_error: 1.7008 - val_loss
: 7.6376 - val_mean_absolute_error: 2.
1969
2435 Epoch 1192/10000
2436 - 13s - loss: 4.7136 -
mean_absolute_error: 1.7000 - val_loss
: 7.6380 - val_mean_absolute_error: 2.
1968
2437 Epoch 1193/10000
2438 - 13s - loss: 4.7135 -
```

```

2438 mean_absolute_error: 1.6999 - val_loss
    : 7.6383 - val_mean_absolute_error: 2.
1970
2439 Epoch 1194/10000
2440 - 13s - loss: 4.7136 -
    mean_absolute_error: 1.7001 - val_loss
    : 7.6383 - val_mean_absolute_error: 2.
1972
2441 Epoch 01194: early stopping
2442 history.history.keys = ['
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