In this exercise you'll try to build a neural network that predicts the price of a house according to a simple formula.

So, imagine if house pricing was as easy as a house costs 50k + 50k per bedroom, so that a 1 bedroom house costs 100k, a 2 bedroom house costs 150k etc.

How would you create a neural network that learns this relationship so that it would predict a 7 bedroom house as costing close to 400k etc.

Hint: Your network might work better if you scale the house price down. You don't have to give the answer 400...it might be better to create something that predicts the number 4, and then your answer is in the 'hundreds of thousands' etc.

```
In [142]:  import tensorflow as tf
           import numpy as np
           from tensorflow import keras
```

```
In [185]:  # GRADED FUNCTION: house_model
           def house_model(y_new):
               xs = np.array([1.0,2.0,3.0,4.0,5.0,6.0], dtype=float)
               ys = np.array([100000.0,150000.0,200000.0,250000.0,300000.0,350
           000.0], dtype=float)
               model = tf.keras.Sequential([keras.layers.Dense(units=1,input_s
           hape=[1])])
               model.compile(optimizer='sgd',loss='mean_squared_error')
               model.fit(xs,ys,epochs=4000)
               return model.predict(y_new).astype(int)[0]/100000
```

```
In [184]:  prediction = house_model([7.0])
           print(prediction)
```

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Epoch 1/4000
6/6 [==============================] - 2s 362ms/sample - loss: 579
15559936.0000
Epoch 2/4000
6/6 [==============================] - 0s 321us/sample - loss: 269
39697152.0000
Epoch 3/4000
6/6 [==============================] - 0s 294us/sample - loss: 126
02163200.0000
Epoch 4/4000
6/6 [==============================] - 0s 273us/sample - loss: 596
5347328.0000
Epoch 5/4000
6/6 [==============================] - 0s 271us/sample - loss: 289
2664064.0000
Epoch 6/4000
6/6 [==============================] - 0s 224us/sample - loss: 146
9573504.0000
Epoch 7/4000
6/6 [==============================] - 0s 241us/sample - loss: 809
971008.0000
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Epoch 8/4000
6/6 [==============================] - 0s 210us/sample - loss: 503
742432.0000
Epoch 9/4000
6/6 [==============================] - 0s 217us/sample - loss: 361
071712.0000
Epoch 10/4000
6/6 [==============================] - 0s 251us/sample - loss: 294
107424.0000
Epoch 11/4000
6/6 [==============================] - 0s 268us/sample - loss: 262
189008.0000
Epoch 12/4000
6/6 [==============================] - 0s 263us/sample - loss: 246
497808.0000
Epoch 13/4000
6/6 [==============================] - 0s 232us/sample - loss: 238
323760.0000
Epoch 14/4000
6/6 [==============================] - 0s 207us/sample - loss: 233
635344.0000
Epoch 15/4000
6/6 [==============================] - 0s 241us/sample - loss: 230
566864.0000
Epoch 16/4000
6/6 [==============================] - 0s 227us/sample - loss: 228
254656.0000
Epoch 17/4000
6/6 [==============================] - 0s 238us/sample - loss: 226
299200.0000
Epoch 18/4000
6/6 [==============================] - 0s 241us/sample - loss: 224
514864.0000
Epoch 19/4000
6/6 [==============================] - 0s 238us/sample - loss: 222
816560.0000
Epoch 20/4000
6/6 [==============================] - 0s 257us/sample - loss: 221
164080.0000
Epoch 21/4000
6/6 [==============================] - 0s 200us/sample - loss: 219
539456.0000
Epoch 22/4000
6/6 [==============================] - 0s 244us/sample - loss: 217
933744.0000
Epoch 23/4000
6/6 [==============================] - 0s 13ms/sample - loss: 2163
42976.0000
Epoch 24/4000
6/6 [==============================] - 0s 255us/sample - loss: 214
765680.0000
Epoch 25/4000
6/6 [==============================] - 0s 255us/sample - loss: 213
200176.0000
Epoch 26/4000
6/6 [==============================] - 0s 242us/sample - loss: 211
646768.0000
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Epoch 27/4000
6/6 [==============================] - 0s 207us/sample - loss: 210
104624.0000
Epoch 28/4000
6/6 [==============================] - 0s 228us/sample - loss: 208
573744.0000
Epoch 29/4000
6/6 [==============================] - 0s 220us/sample - loss: 207
054064.0000
Epoch 30/4000
6/6 [==============================] - 0s 271us/sample - loss: 205
545728.0000
Epoch 31/4000
6/6 [==============================] - 0s 232us/sample - loss: 204
048304.0000
Epoch 32/4000
6/6 [==============================] - 0s 211us/sample - loss: 202
561536.0000
Epoch 33/4000
6/6 [==============================] - 0s 199us/sample - loss: 201
085776.0000
Epoch 34/4000
6/6 [==============================] - 0s 14ms/sample - loss: 1996
20736.0000
Epoch 35/4000
6/6 [==============================] - 0s 262us/sample - loss: 198
166272.0000
Epoch 36/4000
6/6 [==============================] - 0s 215us/sample - loss: 196
722608.0000
Epoch 37/4000
6/6 [==============================] - 0s 222us/sample - loss: 195
289360.0000
Epoch 38/4000
6/6 [==============================] - 0s 253us/sample - loss: 193
866608.0000
Epoch 39/4000
6/6 [==============================] - 0s 236us/sample - loss: 192
454272.0000
Epoch 40/4000
6/6 [==============================] - 0s 295us/sample - loss: 191
052048.0000
Epoch 41/4000
6/6 [==============================] - 0s 247us/sample - loss: 189
660160.0000
Epoch 42/4000
6/6 [==============================] - 0s 238us/sample - loss: 188
278320.0000
Epoch 43/4000
6/6 [==============================] - 0s 208us/sample - loss: 186
906704.0000
Epoch 44/4000
6/6 [==============================] - 0s 221us/sample - loss: 185
545072.0000
Epoch 45/4000
6/6 [==============================] - 0s 13ms/sample - loss: 1841
93264.0000
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Epoch 46/4000
6/6 [==============================] - 0s 255us/sample - loss: 182
851200.0000
Epoch 47/4000
6/6 [==============================] - 0s 274us/sample - loss: 181
518928.0000
Epoch 48/4000
6/6 [==============================] - 0s 265us/sample - loss: 180
196560.0000
Epoch 49/4000
6/6 [==============================] - 0s 242us/sample - loss: 178
883760.0000
Epoch 50/4000
6/6 [==============================] - 0s 261us/sample - loss: 177
580448.0000
Epoch 51/4000
6/6 [==============================] - 0s 305us/sample - loss: 176
286720.0000
Epoch 52/4000
6/6 [==============================] - 0s 234us/sample - loss: 175
002256.0000
Epoch 53/4000
6/6 [==============================] - 0s 231us/sample - loss: 173
727312.0000
Epoch 54/4000
6/6 [==============================] - 0s 279us/sample - loss: 172
461648.0000
Epoch 55/4000
6/6 [==============================] - 0s 212us/sample - loss: 171
205072.0000
Epoch 56/4000
6/6 [==============================] - 0s 13ms/sample - loss: 1699
57904.0000
Epoch 57/4000
6/6 [==============================] - 0s 298us/sample - loss: 168
719504.0000
Epoch 58/4000
6/6 [==============================] - 0s 240us/sample - loss: 167
490256.0000
Epoch 59/4000
6/6 [==============================] - 0s 232us/sample - loss: 166
270208.0000
Epoch 60/4000
6/6 [==============================] - 0s 294us/sample - loss: 165
058768.0000
Epoch 61/4000
6/6 [==============================] - 0s 303us/sample - loss: 163
856240.0000
Epoch 62/4000
6/6 [==============================] - 0s 238us/sample - loss: 162
662576.0000
Epoch 63/4000
6/6 [==============================] - 0s 292us/sample - loss: 161
477264.0000
Epoch 64/4000
6/6 [==============================] - 0s 204us/sample - loss: 160
300912.0000
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Epoch 65/4000
6/6 [==============================] - 0s 226us/sample - loss: 159
133008.0000
Epoch 66/4000
6/6 [==============================] - 0s 257us/sample - loss: 157
973584.0000
Epoch 67/4000
6/6 [==============================] - 0s 264us/sample - loss: 156
822592.0000
Epoch 68/4000
6/6 [==============================] - 0s 303us/sample - loss: 155
680224.0000
Epoch 69/4000
6/6 [==============================] - 0s 234us/sample - loss: 154
546064.0000
Epoch 70/4000
6/6 [==============================] - 0s 232us/sample - loss: 153
419984.0000
Epoch 71/4000
6/6 [==============================] - 0s 209us/sample - loss: 152
302352.0000
Epoch 72/4000
6/6 [==============================] - 0s 203us/sample - loss: 151
192592.0000
Epoch 73/4000
6/6 [==============================] - 0s 221us/sample - loss: 150
091152.0000
Epoch 74/4000
6/6 [==============================] - 0s 226us/sample - loss: 148
997712.0000
Epoch 75/4000
6/6 [==============================] - 0s 229us/sample - loss: 147
912176.0000
Epoch 76/4000
6/6 [==============================] - 0s 14ms/sample - loss: 1468
34384.0000
Epoch 77/4000
6/6 [==============================] - 0s 256us/sample - loss: 145
764624.0000
Epoch 78/4000
6/6 [==============================] - 0s 259us/sample - loss: 144
702640.0000
Epoch 79/4000
6/6 [==============================] - 0s 225us/sample - loss: 143
648544.0000
Epoch 80/4000
6/6 [==============================] - 0s 269us/sample - loss: 142
602032.0000
Epoch 81/4000
6/6 [==============================] - 0s 227us/sample - loss: 141
563008.0000
Epoch 82/4000
6/6 [==============================] - 0s 234us/sample - loss: 140
531504.0000
Epoch 83/4000
6/6 [==============================] - 0s 232us/sample - loss: 139
507728.0000
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Epoch 84/4000
6/6 [==============================] - 0s 244us/sample - loss: 138
491472.0000
Epoch 85/4000
6/6 [==============================] - 0s 206us/sample - loss: 137
482432.0000
Epoch 86/4000
6/6 [==============================] - 0s 252us/sample - loss: 136
480784.0000
Epoch 87/4000
6/6 [==============================] - 0s 13ms/sample - loss: 1354
86336.0000
Epoch 88/4000
6/6 [==============================] - 0s 240us/sample - loss: 134
499344.0000
Epoch 89/4000
6/6 [==============================] - 0s 240us/sample - loss: 133
519416.0000
Epoch 90/4000
6/6 [==============================] - 0s 218us/sample - loss: 132
546696.0000
Epoch 91/4000
6/6 [==============================] - 0s 229us/sample - loss: 131
581032.0000
Epoch 92/4000
6/6 [==============================] - 0s 224us/sample - loss: 130
622440.0000
Epoch 93/4000
6/6 [==============================] - 0s 222us/sample - loss: 129
670656.0000
Epoch 94/4000
6/6 [==============================] - 0s 216us/sample - loss: 128
726056.0000
Epoch 95/4000
6/6 [==============================] - 0s 234us/sample - loss: 127
788096.0000
Epoch 96/4000
6/6 [==============================] - 0s 204us/sample - loss: 126
857128.0000
Epoch 97/4000
6/6 [==============================] - 0s 249us/sample - loss: 125
932888.0000
Epoch 98/4000
6/6 [==============================] - 0s 14ms/sample - loss: 1250
15448.0000
Epoch 99/4000
6/6 [==============================] - 0s 247us/sample - loss: 124
104584.0000
Epoch 100/4000
6/6 [==============================] - 0s 208us/sample - loss: 123
200488.0000
Epoch 101/4000
6/6 [==============================] - 0s 270us/sample - loss: 122
302872.0000
Epoch 102/4000
6/6 [==============================] - 0s 266us/sample - loss: 121
411880.0000
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Epoch 103/4000
6/6 [==============================] - 0s 211us/sample - loss: 120
527192.0000
Epoch 104/4000
6/6 [==============================] - 0s 218us/sample - loss: 119
649112.0000
Epoch 105/4000
6/6 [==============================] - 0s 208us/sample - loss: 118
777440.0000
Epoch 106/4000
6/6 [==============================] - 0s 237us/sample - loss: 117
912088.0000
Epoch 107/4000
6/6 [==============================] - 0s 14ms/sample - loss: 1170
52992.0000
Epoch 108/4000
6/6 [==============================] - 0s 257us/sample - loss: 116
200256.0000
Epoch 109/4000
6/6 [==============================] - 0s 242us/sample - loss: 115
353632.0000
Epoch 110/4000
6/6 [==============================] - 0s 226us/sample - loss: 114
513248.0000
Epoch 111/4000
6/6 [==============================] - 0s 292us/sample - loss: 113
679000.0000
Epoch 112/4000
6/6 [==============================] - 0s 233us/sample - loss: 112
850752.0000
Epoch 113/4000
6/6 [==============================] - 0s 242us/sample - loss: 112
028536.0000
Epoch 114/4000
6/6 [==============================] - 0s 221us/sample - loss: 111
212344.0000
Epoch 115/4000
6/6 [==============================] - 0s 203us/sample - loss: 110
402040.0000
Epoch 116/4000
6/6 [==============================] - 0s 207us/sample - loss: 109
597768.0000
Epoch 117/4000
6/6 [==============================] - 0s 231us/sample - loss: 108
799256.0000
Epoch 118/4000
6/6 [==============================] - 0s 13ms/sample - loss: 1080
06648.0000
Epoch 119/4000
6/6 [==============================] - 0s 243us/sample - loss: 107
219584.0000
Epoch 120/4000
6/6 [==============================] - 0s 250us/sample - loss: 106
438520.0000
Epoch 121/4000
6/6 [==============================] - 0s 289us/sample - loss: 105
663168.0000
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Epoch 122/4000
6/6 [==============================] - 0s 262us/sample - loss: 104
893240.0000
Epoch 123/4000
6/6 [==============================] - 0s 225us/sample - loss: 104
129048.0000
Epoch 124/4000
6/6 [==============================] - 0s 267us/sample - loss: 103
370368.0000
Epoch 125/4000
6/6 [==============================] - 0s 239us/sample - loss: 102
617304.0000
Epoch 126/4000
6/6 [==============================] - 0s 206us/sample - loss: 101
869720.0000
Epoch 127/4000
6/6 [==============================] - 0s 14ms/sample - loss: 1011
27552.0000
Epoch 128/4000
6/6 [==============================] - 0s 286us/sample - loss: 100
390776.0000
Epoch 129/4000
6/6 [==============================] - 0s 207us/sample - loss: 996
59328.0000
Epoch 130/4000
6/6 [==============================] - 0s 246us/sample - loss: 989
33272.0000
Epoch 131/4000
6/6 [==============================] - 0s 237us/sample - loss: 982
12456.0000
Epoch 132/4000
6/6 [==============================] - 0s 315us/sample - loss: 974
96840.0000
Epoch 133/4000
6/6 [==============================] - 0s 225us/sample - loss: 967
86592.0000
Epoch 134/4000
6/6 [==============================] - 0s 286us/sample - loss: 960
81496.0000
Epoch 135/4000
6/6 [==============================] - 0s 297us/sample - loss: 953
81504.0000
Epoch 136/4000
6/6 [==============================] - 0s 238us/sample - loss: 946
86624.0000
Epoch 137/4000
6/6 [==============================] - 0s 13ms/sample - loss: 9399
6744.0000
Epoch 138/4000
6/6 [==============================] - 0s 243us/sample - loss: 933
11872.0000
Epoch 139/4000
6/6 [==============================] - 0s 211us/sample - loss: 926
32104.0000
Epoch 140/4000
6/6 [==============================] - 0s 225us/sample - loss: 919
57176.0000
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Epoch 141/4000
6/6 [==============================] - 0s 236us/sample - loss: 912
87232.0000
Epoch 142/4000
6/6 [==============================] - 0s 231us/sample - loss: 906
22152.0000
Epoch 143/4000
6/6 [==============================] - 0s 248us/sample - loss: 899
61920.0000
Epoch 144/4000
6/6 [==============================] - 0s 217us/sample - loss: 893
06472.0000
Epoch 145/4000
6/6 [==============================] - 0s 243us/sample - loss: 886
55920.0000
Epoch 146/4000
6/6 [==============================] - 0s 237us/sample - loss: 880
09992.0000
Epoch 147/4000
6/6 [==============================] - 0s 199us/sample - loss: 873
68752.0000
Epoch 148/4000
6/6 [==============================] - 0s 13ms/sample - loss: 8673
2288.0000
Epoch 149/4000
6/6 [==============================] - 0s 255us/sample - loss: 861
00312.0000
Epoch 150/4000
6/6 [==============================] - 0s 234us/sample - loss: 854
72984.0000
Epoch 151/4000
6/6 [==============================] - 0s 211us/sample - loss: 848
50224.0000
Epoch 152/4000
6/6 [==============================] - 0s 270us/sample - loss: 842
32216.0000
Epoch 153/4000
6/6 [==============================] - 0s 290us/sample - loss: 836
18432.0000
Epoch 154/4000
6/6 [==============================] - 0s 229us/sample - loss: 830
09184.0000
Epoch 155/4000
6/6 [==============================] - 0s 223us/sample - loss: 824
04504.0000
Epoch 156/4000
6/6 [==============================] - 0s 207us/sample - loss: 818
04128.0000
Epoch 157/4000
6/6 [==============================] - 0s 201us/sample - loss: 812
08096.0000
Epoch 158/4000
6/6 [==============================] - 0s 250us/sample - loss: 806
16544.0000
Epoch 159/4000
6/6 [==============================] - 0s 246us/sample - loss: 800
29160.0000
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Epoch 160/4000
6/6 [==============================] - 0s 242us/sample - loss: 794
46048.0000
Epoch 161/4000
6/6 [==============================] - 0s 222us/sample - loss: 788
67248.0000
Epoch 162/4000
6/6 [==============================] - 0s 202us/sample - loss: 782
92696.0000
Epoch 163/4000
6/6 [==============================] - 0s 224us/sample - loss: 777
22280.0000
Epoch 164/4000
6/6 [==============================] - 0s 200us/sample - loss: 771
56008.0000
Epoch 165/4000
6/6 [==============================] - 0s 209us/sample - loss: 765
94008.0000
Epoch 166/4000
6/6 [==============================] - 0s 202us/sample - loss: 760
35936.0000
Epoch 167/4000
6/6 [==============================] - 0s 202us/sample - loss: 754
81880.0000
Epoch 168/4000
6/6 [==============================] - 0s 14ms/sample - loss: 7493
1968.0000
Epoch 169/4000
6/6 [==============================] - 0s 251us/sample - loss: 743
86032.0000
Epoch 170/4000
6/6 [==============================] - 0s 231us/sample - loss: 738
44064.0000
Epoch 171/4000
6/6 [==============================] - 0s 255us/sample - loss: 733
06136.0000
Epoch 172/4000
6/6 [==============================] - 0s 221us/sample - loss: 727
72008.0000
Epoch 173/4000
6/6 [==============================] - 0s 235us/sample - loss: 722
41896.0000
Epoch 174/4000
6/6 [==============================] - 0s 235us/sample - loss: 717
15512.0000
Epoch 175/4000
6/6 [==============================] - 0s 240us/sample - loss: 711
93032.0000
Epoch 176/4000
6/6 [==============================] - 0s 261us/sample - loss: 706
74312.0000
Epoch 177/4000
6/6 [==============================] - 0s 192us/sample - loss: 701
59480.0000
Epoch 178/4000
6/6 [==============================] - 0s 241us/sample - loss: 696
48344.0000
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Epoch 179/4000
6/6 [==============================] - 0s 248us/sample - loss: 691
40952.0000
Epoch 180/4000
6/6 [==============================] - 0s 244us/sample - loss: 686
37160.0000
Epoch 181/4000
6/6 [==============================] - 0s 227us/sample - loss: 681
37112.0000
Epoch 182/4000
6/6 [==============================] - 0s 238us/sample - loss: 676
40632.0000
Epoch 183/4000
6/6 [==============================] - 0s 216us/sample - loss: 671
47936.0000
Epoch 184/4000
6/6 [==============================] - 0s 238us/sample - loss: 666
58620.0000
Epoch 185/4000
6/6 [==============================] - 0s 227us/sample - loss: 661
73132.0000
Epoch 186/4000
6/6 [==============================] - 0s 273us/sample - loss: 656
91012.0000
Epoch 187/4000
6/6 [==============================] - 0s 241us/sample - loss: 652
12320.0000
Epoch 188/4000
6/6 [==============================] - 0s 14ms/sample - loss: 6473
7268.0000
Epoch 189/4000
6/6 [==============================] - 0s 286us/sample - loss: 642
65588.0000
Epoch 190/4000
6/6 [==============================] - 0s 207us/sample - loss: 637
97360.0000
Epoch 191/4000
6/6 [==============================] - 0s 258us/sample - loss: 633
32604.0000
Epoch 192/4000
6/6 [==============================] - 0s 224us/sample - loss: 628
71124.0000
Epoch 193/4000
6/6 [==============================] - 0s 230us/sample - loss: 624
13092.0000
Epoch 194/4000
6/6 [==============================] - 0s 213us/sample - loss: 619
58352.0000
Epoch 195/4000
6/6 [==============================] - 0s 209us/sample - loss: 615
07024.0000
Epoch 196/4000
6/6 [==============================] - 0s 249us/sample - loss: 610
58932.0000
Epoch 197/4000
6/6 [==============================] - 0s 218us/sample - loss: 606
14036.0000
```

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Epoch 198/4000
6/6 [==============================] - 0s 279us/sample - loss: 601
72512.0000
Epoch 199/4000
6/6 [==============================] - 0s 211us/sample - loss: 597
34064.0000
Epoch 200/4000
6/6 [==============================] - 0s 271us/sample - loss: 592
98860.0000
Epoch 201/4000
6/6 [==============================] - 0s 235us/sample - loss: 588
66828.0000
Epoch 202/4000
6/6 [==============================] - 0s 288us/sample - loss: 584
37996.0000
Epoch 203/4000
6/6 [==============================] - 0s 234us/sample - loss: 580
12188.0000
Epoch 204/4000
6/6 [==============================] - 0s 216us/sample - loss: 575
89588.0000
Epoch 205/4000
6/6 [==============================] - 0s 203us/sample - loss: 571
69972.0000
Epoch 206/4000
6/6 [==============================] - 0s 206us/sample - loss: 567
53516.0000
Epoch 207/4000
6/6 [==============================] - 0s 243us/sample - loss: 563
40028.0000
Epoch 208/4000
6/6 [==============================] - 0s 214us/sample - loss: 559
29516.0000
Epoch 209/4000
6/6 [==============================] - 0s 235us/sample - loss: 555
22028.0000
Epoch 210/4000
6/6 [==============================] - 0s 14ms/sample - loss: 5511
7572.0000
Epoch 211/4000
6/6 [==============================] - 0s 211us/sample - loss: 547
15916.0000
Epoch 212/4000
6/6 [==============================] - 0s 207us/sample - loss: 543
17260.0000
Epoch 213/4000
6/6 [==============================] - 0s 243us/sample - loss: 539
21628.0000
Epoch 214/4000
6/6 [==============================] - 0s 221us/sample - loss: 535
28652.0000
Epoch 215/4000
6/6 [==============================] - 0s 301us/sample - loss: 531
38768.0000
Epoch 216/4000
6/6 [==============================] - 0s 206us/sample - loss: 527
51628.0000
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Epoch 217/4000
6/6 [==============================] - 0s 249us/sample - loss: 523
67264.0000
Epoch 218/4000
6/6 [==============================] - 0s 232us/sample - loss: 519
85788.0000
Epoch 219/4000
6/6 [==============================] - 0s 224us/sample - loss: 516
06944.0000
Epoch 220/4000
6/6 [==============================] - 0s 14ms/sample - loss: 5123
0988.0000
Epoch 221/4000
6/6 [==============================] - 0s 253us/sample - loss: 508
57708.0000
Epoch 222/4000
6/6 [==============================] - 0s 277us/sample - loss: 504
87236.0000
Epoch 223/4000
6/6 [==============================] - 0s 245us/sample - loss: 501
19372.0000
Epoch 224/4000
6/6 [==============================] - 0s 227us/sample - loss: 497
54256.0000
Epoch 225/4000
6/6 [==============================] - 0s 266us/sample - loss: 493
91744.0000
Epoch 226/4000
6/6 [==============================] - 0s 241us/sample - loss: 490
31892.0000
Epoch 227/4000
6/6 [==============================] - 0s 203us/sample - loss: 486
74700.0000
Epoch 228/4000
6/6 [==============================] - 0s 224us/sample - loss: 483
20128.0000
Epoch 229/4000
6/6 [==============================] - 0s 245us/sample - loss: 479
68004.0000
Epoch 230/4000
6/6 [==============================] - 0s 207us/sample - loss: 476
18532.0000
Epoch 231/4000
6/6 [==============================] - 0s 254us/sample - loss: 472
71584.0000
Epoch 232/4000
6/6 [==============================] - 0s 237us/sample - loss: 469
27280.0000
Epoch 233/4000
6/6 [==============================] - 0s 235us/sample - loss: 465
85244.0000
Epoch 234/4000
6/6 [==============================] - 0s 263us/sample - loss: 462
45836.0000
Epoch 235/4000
6/6 [==============================] - 0s 224us/sample - loss: 459
09004.0000
```

```
Epoch 236/4000
6/6 [==============================] - 0s 283us/sample - loss: 455
74528.0000
Epoch 237/4000
6/6 [==============================] - 0s 226us/sample - loss: 452
42496.0000
Epoch 238/4000
6/6 [==============================] - 0s 204us/sample - loss: 449
12864.0000
Epoch 239/4000
6/6 [==============================] - 0s 201us/sample - loss: 445
85708.0000
Epoch 240/4000
6/6 [==============================] - 0s 212us/sample - loss: 442
60848.0000
Epoch 241/4000
6/6 [==============================] - 0s 14ms/sample - loss: 4393
8356.0000
Epoch 242/4000
6/6 [==============================] - 0s 254us/sample - loss: 436
18284.0000
Epoch 243/4000
6/6 [==============================] - 0s 229us/sample - loss: 433
00468.0000
Epoch 244/4000
6/6 [==============================] - 0s 237us/sample - loss: 429
85056.0000
Epoch 245/4000
6/6 [==============================] - 0s 261us/sample - loss: 426
71800.0000
Epoch 246/4000
6/6 [==============================] - 0s 224us/sample - loss: 423
60948.0000
Epoch 247/4000
6/6 [==============================] - 0s 227us/sample - loss: 420
52304.0000
Epoch 248/4000
6/6 [==============================] - 0s 227us/sample - loss: 417
45980.0000
Epoch 249/4000
6/6 [==============================] - 0s 209us/sample - loss: 414
41828.0000
Epoch 250/4000
6/6 [==============================] - 0s 246us/sample - loss: 411
39876.0000
Epoch 251/4000
6/6 [==============================] - 0s 14ms/sample - loss: 4084
0176.0000
Epoch 252/4000
6/6 [==============================] - 0s 246us/sample - loss: 405
42624.0000
Epoch 253/4000
6/6 [==============================] - 0s 225us/sample - loss: 402
47216.0000
Epoch 254/4000
6/6 [==============================] - 0s 270us/sample - loss: 399
53996.0000
```

```
Epoch 255/4000
6/6 [==============================] - 0s 222us/sample - loss: 396
62900.0000
Epoch 256/4000
6/6 [==============================] - 0s 232us/sample - loss: 393
74032.0000
Epoch 257/4000
6/6 [==============================] - 0s 222us/sample - loss: 390
87140.0000
Epoch 258/4000
6/6 [==============================] - 0s 218us/sample - loss: 388
02352.0000
Epoch 259/4000
6/6 [==============================] - 0s 227us/sample - loss: 385
19648.0000
Epoch 260/4000
6/6 [==============================] - 0s 245us/sample - loss: 382
39040.0000
Epoch 261/4000
6/6 [==============================] - 0s 14ms/sample - loss: 3796
0356.0000
Epoch 262/4000
6/6 [==============================] - 0s 254us/sample - loss: 376
83888.0000
Epoch 263/4000
6/6 [==============================] - 0s 225us/sample - loss: 374
09332.0000
Epoch 264/4000
6/6 [==============================] - 0s 234us/sample - loss: 371
36780.0000
Epoch 265/4000
6/6 [==============================] - 0s 272us/sample - loss: 368
66204.0000
Epoch 266/4000
6/6 [==============================] - 0s 212us/sample - loss: 365
97620.0000
Epoch 267/4000
6/6 [==============================] - 0s 275us/sample - loss: 363
30924.0000
Epoch 268/4000
6/6 [==============================] - 0s 202us/sample - loss: 360
66300.0000
Epoch 269/4000
6/6 [==============================] - 0s 248us/sample - loss: 358
03580.0000
Epoch 270/4000
6/6 [==============================] - 0s 203us/sample - loss: 355
42740.0000
Epoch 271/4000
6/6 [==============================] - 0s 14ms/sample - loss: 3528
3748.0000
Epoch 272/4000
6/6 [==============================] - 0s 251us/sample - loss: 350
26660.0000
Epoch 273/4000
6/6 [==============================] - 0s 255us/sample - loss: 347
71528.0000
```

```
Epoch 274/4000
6/6 [==============================] - 0s 280us/sample - loss: 345
18180.0000
Epoch 275/4000
6/6 [==============================] - 0s 215us/sample - loss: 342
66652.0000
Epoch 276/4000
6/6 [==============================] - 0s 215us/sample - loss: 340
17032.0000
Epoch 277/4000
6/6 [==============================] - 0s 212us/sample - loss: 337
69148.0000
Epoch 278/4000
6/6 [==============================] - 0s 229us/sample - loss: 335
23166.0000
Epoch 279/4000
6/6 [==============================] - 0s 267us/sample - loss: 332
78874.0000
Epoch 280/4000
6/6 [==============================] - 0s 211us/sample - loss: 330
36486.0000
Epoch 281/4000
6/6 [==============================] - 0s 240us/sample - loss: 327
95766.0000
Epoch 282/4000
6/6 [==============================] - 0s 252us/sample - loss: 325
56854.0000
Epoch 283/4000
6/6 [==============================] - 0s 241us/sample - loss: 323
19658.0000
Epoch 284/4000
6/6 [==============================] - 0s 212us/sample - loss: 320
84162.0000
Epoch 285/4000
6/6 [==============================] - 0s 303us/sample - loss: 318
50426.0000
Epoch 286/4000
6/6 [==============================] - 0s 294us/sample - loss: 316
18400.0000
Epoch 287/4000
6/6 [==============================] - 0s 240us/sample - loss: 313
88038.0000
Epoch 288/4000
6/6 [==============================] - 0s 227us/sample - loss: 311
59322.0000
Epoch 289/4000
6/6 [==============================] - 0s 254us/sample - loss: 309
32328.0000
Epoch 290/4000
6/6 [==============================] - 0s 290us/sample - loss: 307
06992.0000
Epoch 291/4000
6/6 [==============================] - 0s 247us/sample - loss: 304
83240.0000
Epoch 292/4000
6/6 [==============================] - 0s 246us/sample - loss: 302
61168.0000
```

```
Epoch 293/4000
6/6 [==============================] - 0s 223us/sample - loss: 300
40736.0000
Epoch 294/4000
6/6 [==============================] - 0s 221us/sample - loss: 298
21850.0000
Epoch 295/4000
6/6 [==============================] - 0s 250us/sample - loss: 296
04576.0000
Epoch 296/4000
6/6 [==============================] - 0s 295us/sample - loss: 293
88850.0000
Epoch 297/4000
6/6 [==============================] - 0s 249us/sample - loss: 291
74734.0000
Epoch 298/4000
6/6 [==============================] - 0s 234us/sample - loss: 289
62162.0000
Epoch 299/4000
6/6 [==============================] - 0s 255us/sample - loss: 287
51162.0000
Epoch 300/4000
6/6 [==============================] - 0s 206us/sample - loss: 285
41730.0000
Epoch 301/4000
6/6 [==============================] - 0s 199us/sample - loss: 283
33798.0000
Epoch 302/4000
6/6 [==============================] - 0s 13ms/sample - loss: 2812
7384.0000
Epoch 303/4000
6/6 [==============================] - 0s 266us/sample - loss: 279
22426.0000
Epoch 304/4000
6/6 [==============================] - 0s 250us/sample - loss: 277
19008.0000
Epoch 305/4000
6/6 [==============================] - 0s 234us/sample - loss: 275
17040.0000
Epoch 306/4000
6/6 [==============================] - 0s 288us/sample - loss: 273
16602.0000
Epoch 307/4000
6/6 [==============================] - 0s 225us/sample - loss: 271
17560.0000
Epoch 308/4000
6/6 [==============================] - 0s 268us/sample - loss: 269
19968.0000
Epoch 309/4000
6/6 [==============================] - 0s 242us/sample - loss: 267
23872.0000
Epoch 310/4000
6/6 [==============================] - 0s 215us/sample - loss: 265
29168.0000
Epoch 311/4000
6/6 [==============================] - 0s 238us/sample - loss: 263
35882.0000
```

```
Epoch 312/4000
6/6 [==============================] - 0s 264us/sample - loss: 261
43952.0000
Epoch 313/4000
6/6 [==============================] - 0s 13ms/sample - loss: 2595
3510.0000
Epoch 314/4000
6/6 [==============================] - 0s 264us/sample - loss: 257
64474.0000
Epoch 315/4000
6/6 [==============================] - 0s 288us/sample - loss: 255
76734.0000
Epoch 316/4000
6/6 [==============================] - 0s 237us/sample - loss: 253
90440.0000
Epoch 317/4000
6/6 [==============================] - 0s 304us/sample - loss: 252
05394.0000
Epoch 318/4000
6/6 [==============================] - 0s 218us/sample - loss: 250
21778.0000
Epoch 319/4000
6/6 [==============================] - 0s 283us/sample - loss: 248
39440.0000
Epoch 320/4000
6/6 [==============================] - 0s 210us/sample - loss: 246
58474.0000
Epoch 321/4000
6/6 [==============================] - 0s 255us/sample - loss: 244
78810.0000
Epoch 322/4000
6/6 [==============================] - 0s 298us/sample - loss: 243
00496.0000
Epoch 323/4000
6/6 [==============================] - 0s 269us/sample - loss: 241
23474.0000
Epoch 324/4000
6/6 [==============================] - 0s 238us/sample - loss: 239
47718.0000
Epoch 325/4000
6/6 [==============================] - 0s 239us/sample - loss: 237
73234.0000
Epoch 326/4000
6/6 [==============================] - 0s 251us/sample - loss: 236
00080.0000
Epoch 327/4000
6/6 [==============================] - 0s 222us/sample - loss: 234
28096.0000
Epoch 328/4000
6/6 [==============================] - 0s 198us/sample - loss: 232
57414.0000
Epoch 329/4000
6/6 [==============================] - 0s 252us/sample - loss: 230
87984.0000
Epoch 330/4000
6/6 [==============================] - 0s 313us/sample - loss: 229
19722.0000
```

```
Epoch 331/4000
6/6 [==============================] - 0s 234us/sample - loss: 227
52806.0000
Epoch 332/4000
6/6 [==============================] - 0s 14ms/sample - loss: 2258
6958.0000
Epoch 333/4000
6/6 [==============================] - 0s 279us/sample - loss: 224
22502.0000
Epoch 334/4000
6/6 [==============================] - 0s 215us/sample - loss: 222
59074.0000
Epoch 335/4000
6/6 [==============================] - 0s 218us/sample - loss: 220
96902.0000
Epoch 336/4000
6/6 [==============================] - 0s 223us/sample - loss: 219
35958.0000
Epoch 337/4000
6/6 [==============================] - 0s 278us/sample - loss: 217
76146.0000
Epoch 338/4000
6/6 [==============================] - 0s 217us/sample - loss: 216
17474.0000
Epoch 339/4000
6/6 [==============================] - 0s 250us/sample - loss: 214
60010.0000
Epoch 340/4000
6/6 [==============================] - 0s 294us/sample - loss: 213
03654.0000
Epoch 341/4000
6/6 [==============================] - 0s 219us/sample - loss: 211
48458.0000
Epoch 342/4000
6/6 [==============================] - 0s 197us/sample - loss: 209
94372.0000
Epoch 343/4000
6/6 [==============================] - 0s 275us/sample - loss: 208
41416.0000
Epoch 344/4000
6/6 [==============================] - 0s 235us/sample - loss: 206
89530.0000
Epoch 345/4000
6/6 [==============================] - 0s 252us/sample - loss: 205
38806.0000
Epoch 346/4000
6/6 [==============================] - 0s 299us/sample - loss: 203
89184.0000
Epoch 347/4000
6/6 [==============================] - 0s 218us/sample - loss: 202
40678.0000
Epoch 348/4000
6/6 [==============================] - 0s 290us/sample - loss: 200
93150.0000
Epoch 349/4000
6/6 [==============================] - 0s 246us/sample - loss: 199
46768.0000
```

```
Epoch 350/4000
6/6 [==============================] - 0s 213us/sample - loss: 198
01458.0000
Epoch 351/4000
6/6 [==============================] - 0s 251us/sample - loss: 196
57140.0000
Epoch 352/4000
6/6 [==============================] - 0s 287us/sample - loss: 195
13982.0000
Epoch 353/4000
6/6 [==============================] - 0s 253us/sample - loss: 193
71802.0000
Epoch 354/4000
6/6 [==============================] - 0s 308us/sample - loss: 192
30680.0000
Epoch 355/4000
6/6 [==============================] - 0s 285us/sample - loss: 190
90560.0000
Epoch 356/4000
6/6 [==============================] - 0s 238us/sample - loss: 189
51458.0000
Epoch 357/4000
6/6 [==============================] - 0s 200us/sample - loss: 188
13352.0000
Epoch 358/4000
6/6 [==============================] - 0s 210us/sample - loss: 186
76330.0000
Epoch 359/4000
6/6 [==============================] - 0s 280us/sample - loss: 185
40272.0000
Epoch 360/4000
6/6 [==============================] - 0s 250us/sample - loss: 184
05178.0000
Epoch 361/4000
6/6 [==============================] - 0s 14ms/sample - loss: 1827
1078.0000
Epoch 362/4000
6/6 [==============================] - 0s 279us/sample - loss: 181
37968.0000
Epoch 363/4000
6/6 [==============================] - 0s 234us/sample - loss: 180
05854.0000
Epoch 364/4000
6/6 [==============================] - 0s 251us/sample - loss: 178
74642.0000
Epoch 365/4000
6/6 [==============================] - 0s 257us/sample - loss: 177
44420.0000
Epoch 366/4000
6/6 [==============================] - 0s 215us/sample - loss: 176
15172.0000
Epoch 367/4000
6/6 [==============================] - 0s 290us/sample - loss: 174
86790.0000
Epoch 368/4000
6/6 [==============================] - 0s 214us/sample - loss: 173
59410.0000
```

```
Epoch 369/4000
6/6 [==============================] - 0s 208us/sample - loss: 172
32904.0000
Epoch 370/4000
6/6 [==============================] - 0s 14ms/sample - loss: 1710
7386.0000
Epoch 371/4000
6/6 [==============================] - 0s 280us/sample - loss: 169
82752.0000
Epoch 372/4000
6/6 [==============================] - 0s 228us/sample - loss: 168
58982.0000
Epoch 373/4000
6/6 [==============================] - 0s 263us/sample - loss: 167
36204.0000
Epoch 374/4000
6/6 [==============================] - 0s 287us/sample - loss: 166
14265.0000
Epoch 375/4000
6/6 [==============================] - 0s 272us/sample - loss: 164
93209.0000
Epoch 376/4000
6/6 [==============================] - 0s 211us/sample - loss: 163
73056.0000
Epoch 377/4000
6/6 [==============================] - 0s 199us/sample - loss: 162
53783.0000
Epoch 378/4000
6/6 [==============================] - 0s 225us/sample - loss: 161
35316.0000
Epoch 379/4000
6/6 [==============================] - 0s 246us/sample - loss: 160
17785.0000
Epoch 380/4000
6/6 [==============================] - 0s 207us/sample - loss: 159
01072.0000
Epoch 381/4000
6/6 [==============================] - 0s 14ms/sample - loss: 1578
5244.0000
Epoch 382/4000
6/6 [==============================] - 0s 242us/sample - loss: 156
70247.0000
Epoch 383/4000
6/6 [==============================] - 0s 217us/sample - loss: 155
56053.0000
Epoch 384/4000
6/6 [==============================] - 0s 284us/sample - loss: 154
42712.0000
Epoch 385/4000
6/6 [==============================] - 0s 231us/sample - loss: 153
30240.0000
Epoch 386/4000
6/6 [==============================] - 0s 220us/sample - loss: 152
18503.0000
Epoch 387/4000
6/6 [==============================] - 0s 285us/sample - loss: 151
07699.0000
```

```
Epoch 388/4000
6/6 [==============================] - 0s 205us/sample - loss: 149
97599.0000
Epoch 389/4000
6/6 [==============================] - 0s 233us/sample - loss: 148
88307.0000
Epoch 390/4000
6/6 [==============================] - 0s 243us/sample - loss: 147
79879.0000
Epoch 391/4000
6/6 [==============================] - 0s 213us/sample - loss: 146
72169.0000
Epoch 392/4000
6/6 [==============================] - 0s 277us/sample - loss: 145
65277.0000
Epoch 393/4000
6/6 [==============================] - 0s 233us/sample - loss: 144
59173.0000
Epoch 394/4000
6/6 [==============================] - 0s 253us/sample - loss: 143
53804.0000
Epoch 395/4000
6/6 [==============================] - 0s 298us/sample - loss: 142
49248.0000
Epoch 396/4000
6/6 [==============================] - 0s 310us/sample - loss: 141
45445.0000
Epoch 397/4000
6/6 [==============================] - 0s 226us/sample - loss: 140
42356.0000
Epoch 398/4000
6/6 [==============================] - 0s 219us/sample - loss: 139
40087.0000
Epoch 399/4000
6/6 [==============================] - 0s 216us/sample - loss: 138
38480.0000
Epoch 400/4000
6/6 [==============================] - 0s 252us/sample - loss: 137
37688.0000
Epoch 401/4000
6/6 [==============================] - 0s 243us/sample - loss: 136
37616.0000
Epoch 402/4000
6/6 [==============================] - 0s 262us/sample - loss: 135
38231.0000
Epoch 403/4000
6/6 [==============================] - 0s 270us/sample - loss: 134
39589.0000
Epoch 404/4000
6/6 [==============================] - 0s 234us/sample - loss: 133
41669.0000
Epoch 405/4000
6/6 [==============================] - 0s 253us/sample - loss: 132
44527.0000
Epoch 406/4000
6/6 [==============================] - 0s 227us/sample - loss: 131
48003.0000
```

```
Epoch 407/4000
6/6 [==============================] - 0s 231us/sample - loss: 130
52203.0000
Epoch 408/4000
6/6 [==============================] - 0s 212us/sample - loss: 129
57139.0000
Epoch 409/4000
6/6 [==============================] - 0s 211us/sample - loss: 128
62725.0000
Epoch 410/4000
6/6 [==============================] - 0s 219us/sample - loss: 127
69025.0000
Epoch 411/4000
6/6 [==============================] - 0s 214us/sample - loss: 126
75985.0000
Epoch 412/4000
6/6 [==============================] - 0s 14ms/sample - loss: 1258
3619.0000
Epoch 413/4000
6/6 [==============================] - 0s 352us/sample - loss: 124
91935.0000
Epoch 414/4000
6/6 [==============================] - 0s 304us/sample - loss: 124
00925.0000
Epoch 415/4000
6/6 [==============================] - 0s 239us/sample - loss: 123
10600.0000
Epoch 416/4000
6/6 [==============================] - 0s 250us/sample - loss: 122
20888.0000
Epoch 417/4000
6/6 [==============================] - 0s 235us/sample - loss: 121
31851.0000
Epoch 418/4000
6/6 [==============================] - 0s 223us/sample - loss: 120
43499.0000
Epoch 419/4000
6/6 [==============================] - 0s 272us/sample - loss: 119
55744.0000
Epoch 420/4000
6/6 [==============================] - 0s 218us/sample - loss: 118
68619.0000
Epoch 421/4000
6/6 [==============================] - 0s 14ms/sample - loss: 1178
2176.0000
Epoch 422/4000
6/6 [==============================] - 0s 306us/sample - loss: 116
96344.0000
Epoch 423/4000
6/6 [==============================] - 0s 267us/sample - loss: 116
11084.0000
Epoch 424/4000
6/6 [==============================] - 0s 210us/sample - loss: 115
26527.0000
Epoch 425/4000
6/6 [==============================] - 0s 245us/sample - loss: 114
42544.0000
```

```
Epoch 426/4000
6/6 [==============================] - 0s 208us/sample - loss: 113
59195.0000
Epoch 427/4000
6/6 [==============================] - 0s 246us/sample - loss: 112
76408.0000
Epoch 428/4000
6/6 [==============================] - 0s 204us/sample - loss: 111
94239.0000
Epoch 429/4000
6/6 [==============================] - 0s 223us/sample - loss: 111
12713.0000
Epoch 430/4000
6/6 [==============================] - 0s 264us/sample - loss: 110
31704.0000
Epoch 431/4000
6/6 [==============================] - 0s 235us/sample - loss: 109
51369.0000
Epoch 432/4000
6/6 [==============================] - 0s 294us/sample - loss: 108
71575.0000
Epoch 433/4000
6/6 [==============================] - 0s 256us/sample - loss: 107
92373.0000
Epoch 434/4000
6/6 [==============================] - 0s 229us/sample - loss: 107
13721.0000
Epoch 435/4000
6/6 [==============================] - 0s 213us/sample - loss: 106
35707.0000
Epoch 436/4000
6/6 [==============================] - 0s 269us/sample - loss: 105
58197.0000
Epoch 437/4000
6/6 [==============================] - 0s 259us/sample - loss: 104
81288.0000
Epoch 438/4000
6/6 [==============================] - 0s 225us/sample - loss: 104
04910.0000
Epoch 439/4000
6/6 [==============================] - 0s 259us/sample - loss: 103
29082.0000
Epoch 440/4000
6/6 [==============================] - 0s 248us/sample - loss: 102
53852.0000
Epoch 441/4000
6/6 [==============================] - 0s 264us/sample - loss: 101
79147.0000
Epoch 442/4000
6/6 [==============================] - 0s 324us/sample - loss: 101
04968.0000
Epoch 443/4000
6/6 [==============================] - 0s 248us/sample - loss: 100
31351.0000
Epoch 444/4000
6/6 [==============================] - 0s 218us/sample - loss: 995
8278.0000
```

```
Epoch 445/4000
6/6 [==============================] - 0s 209us/sample - loss: 988
5721.0000
Epoch 446/4000
6/6 [==============================] - 0s 221us/sample - loss: 981
3696.0000
Epoch 447/4000
6/6 [==============================] - 0s 208us/sample - loss: 974
2197.0000
Epoch 448/4000
6/6 [==============================] - 0s 208us/sample - loss: 967
1203.0000
Epoch 449/4000
6/6 [==============================] - 0s 198us/sample - loss: 960
0767.0000
Epoch 450/4000
6/6 [==============================] - 0s 14ms/sample - loss: 9530
813.0000
Epoch 451/4000
6/6 [==============================] - 0s 362us/sample - loss: 946
1380.0000
Epoch 452/4000
6/6 [==============================] - 0s 242us/sample - loss: 939
2440.0000
Epoch 453/4000
6/6 [==============================] - 0s 253us/sample - loss: 932
4041.0000
Epoch 454/4000
6/6 [==============================] - 0s 224us/sample - loss: 925
6129.0000
Epoch 455/4000
6/6 [==============================] - 0s 257us/sample - loss: 918
8668.0000
Epoch 456/4000
6/6 [==============================] - 0s 240us/sample - loss: 912
1735.0000
Epoch 457/4000
6/6 [==============================] - 0s 251us/sample - loss: 905
5285.0000
Epoch 458/4000
6/6 [==============================] - 0s 220us/sample - loss: 898
9296.0000
Epoch 459/4000
6/6 [==============================] - 0s 277us/sample - loss: 892
3776.0000
Epoch 460/4000
6/6 [==============================] - 0s 13ms/sample - loss: 8858
761.0000
Epoch 461/4000
6/6 [==============================] - 0s 320us/sample - loss: 879
4264.0000
Epoch 462/4000
6/6 [==============================] - 0s 229us/sample - loss: 873
0159.0000
Epoch 463/4000
6/6 [==============================] - 0s 307us/sample - loss: 866
6570.0000
```

```
Epoch 464/4000
6/6 [==============================] - 0s 270us/sample - loss: 860
3428.0000
Epoch 465/4000
6/6 [==============================] - 0s 237us/sample - loss: 854
0711.0000
Epoch 466/4000
6/6 [==============================] - 0s 300us/sample - loss: 847
8489.0000
Epoch 467/4000
6/6 [==============================] - 0s 311us/sample - loss: 841
6731.0000
Epoch 468/4000
6/6 [==============================] - 0s 224us/sample - loss: 835
5426.5000
Epoch 469/4000
6/6 [==============================] - 0s 211us/sample - loss: 829
4541.5000
Epoch 470/4000
6/6 [==============================] - 0s 13ms/sample - loss: 8234
134.0000
Epoch 471/4000
6/6 [==============================] - 0s 284us/sample - loss: 817
4132.0000
Epoch 472/4000
6/6 [==============================] - 0s 266us/sample - loss: 811
4582.0000
Epoch 473/4000
6/6 [==============================] - 0s 265us/sample - loss: 805
5474.0000
Epoch 474/4000
6/6 [==============================] - 0s 243us/sample - loss: 799
6765.5000
Epoch 475/4000
6/6 [==============================] - 0s 225us/sample - loss: 793
8498.5000
Epoch 476/4000
6/6 [==============================] - 0s 235us/sample - loss: 788
0679.5000
Epoch 477/4000
6/6 [==============================] - 0s 232us/sample - loss: 782
3241.5000
Epoch 478/4000
6/6 [==============================] - 0s 229us/sample - loss: 776
6254.5000
Epoch 479/4000
6/6 [==============================] - 0s 213us/sample - loss: 770
9666.0000
Epoch 480/4000
6/6 [==============================] - 0s 14ms/sample - loss: 7653
486.5000
Epoch 481/4000
6/6 [==============================] - 0s 309us/sample - loss: 759
7746.0000
Epoch 482/4000
6/6 [==============================] - 0s 246us/sample - loss: 754
2378.0000
```

```
Epoch 483/4000
6/6 [==============================] - 0s 257us/sample - loss: 748
7468.5000
Epoch 484/4000
6/6 [==============================] - 0s 249us/sample - loss: 743
2878.5000
Epoch 485/4000
6/6 [==============================] - 0s 268us/sample - loss: 737
8748.0000
Epoch 486/4000
6/6 [==============================] - 0s 254us/sample - loss: 732
4987.5000
Epoch 487/4000
6/6 [==============================] - 0s 252us/sample - loss: 727
1636.0000
Epoch 488/4000
6/6 [==============================] - 0s 202us/sample - loss: 721
8630.0000
Epoch 489/4000
6/6 [==============================] - 0s 245us/sample - loss: 716
6070.5000
Epoch 490/4000
6/6 [==============================] - 0s 208us/sample - loss: 711
3826.5000
Epoch 491/4000
6/6 [==============================] - 0s 318us/sample - loss: 706
2000.5000
Epoch 492/4000
6/6 [==============================] - 0s 288us/sample - loss: 701
0566.0000
Epoch 493/4000
6/6 [==============================] - 0s 288us/sample - loss: 695
9478.0000
Epoch 494/4000
6/6 [==============================] - 0s 220us/sample - loss: 690
8784.0000
Epoch 495/4000
6/6 [==============================] - 0s 219us/sample - loss: 685
8448.0000
Epoch 496/4000
6/6 [==============================] - 0s 235us/sample - loss: 680
8494.5000
Epoch 497/4000
6/6 [==============================] - 0s 203us/sample - loss: 675
8885.5000
Epoch 498/4000
6/6 [==============================] - 0s 294us/sample - loss: 670
9640.0000
Epoch 499/4000
6/6 [==============================] - 0s 208us/sample - loss: 666
0738.0000
Epoch 500/4000
6/6 [==============================] - 0s 204us/sample - loss: 661
2229.5000
Epoch 501/4000
6/6 [==============================] - 0s 14ms/sample - loss: 6564
041.5000
```

```
Epoch 502/4000
6/6 [==============================] - 0s 249us/sample - loss: 651
6218.5000
Epoch 503/4000
6/6 [==============================] - 0s 280us/sample - loss: 646
8744.5000
Epoch 504/4000
6/6 [==============================] - 0s 266us/sample - loss: 642
1605.5000
Epoch 505/4000
6/6 [==============================] - 0s 251us/sample - loss: 637
4828.0000
Epoch 506/4000
6/6 [==============================] - 0s 305us/sample - loss: 632
8386.5000
Epoch 507/4000
6/6 [==============================] - 0s 225us/sample - loss: 628
2254.0000
Epoch 508/4000
6/6 [==============================] - 0s 236us/sample - loss: 623
6508.0000
Epoch 509/4000
6/6 [==============================] - 0s 263us/sample - loss: 619
1067.5000
Epoch 510/4000
6/6 [==============================] - 0s 212us/sample - loss: 614
5980.5000
Epoch 511/4000
6/6 [==============================] - 0s 13ms/sample - loss: 6101
183.5000
Epoch 512/4000
6/6 [==============================] - 0s 277us/sample - loss: 605
6738.0000
Epoch 513/4000
6/6 [==============================] - 0s 295us/sample - loss: 601
2614.5000
Epoch 514/4000
6/6 [==============================] - 0s 227us/sample - loss: 596
8815.5000
Epoch 515/4000
6/6 [==============================] - 0s 282us/sample - loss: 592
5312.5000
Epoch 516/4000
6/6 [==============================] - 0s 235us/sample - loss: 588
2160.5000
Epoch 517/4000
6/6 [==============================] - 0s 241us/sample - loss: 583
9278.5000
Epoch 518/4000
6/6 [==============================] - 0s 219us/sample - loss: 579
6741.5000
Epoch 519/4000
6/6 [==============================] - 0s 255us/sample - loss: 575
4517.5000
Epoch 520/4000
6/6 [==============================] - 0s 212us/sample - loss: 571
2611.5000
```

```
Epoch 521/4000
6/6 [==============================] - 0s 201us/sample - loss: 567
0974.0000
Epoch 522/4000
6/6 [==============================] - 0s 13ms/sample - loss: 5629
671.5000
Epoch 523/4000
6/6 [==============================] - 0s 289us/sample - loss: 558
8634.5000
Epoch 524/4000
6/6 [==============================] - 0s 223us/sample - loss: 554
7937.5000
Epoch 525/4000
6/6 [==============================] - 0s 241us/sample - loss: 550
7524.5000
Epoch 526/4000
6/6 [==============================] - 0s 254us/sample - loss: 546
7374.5000
Epoch 527/4000
6/6 [==============================] - 0s 219us/sample - loss: 542
7571.5000
Epoch 528/4000
6/6 [==============================] - 0s 228us/sample - loss: 538
7997.5000
Epoch 529/4000
6/6 [==============================] - 0s 223us/sample - loss: 534
8752.5000
Epoch 530/4000
6/6 [==============================] - 0s 220us/sample - loss: 530
9798.0000
Epoch 531/4000
6/6 [==============================] - 0s 241us/sample - loss: 527
1092.5000
Epoch 532/4000
6/6 [==============================] - 0s 14ms/sample - loss: 5232
689.0000
Epoch 533/4000
6/6 [==============================] - 0s 284us/sample - loss: 519
4580.0000
Epoch 534/4000
6/6 [==============================] - 0s 218us/sample - loss: 515
6710.0000
Epoch 535/4000
6/6 [==============================] - 0s 226us/sample - loss: 511
9157.5000
Epoch 536/4000
6/6 [==============================] - 0s 308us/sample - loss: 508
1836.5000
Epoch 537/4000
6/6 [==============================] - 0s 256us/sample - loss: 504
4825.5000
Epoch 538/4000
6/6 [==============================] - 0s 251us/sample - loss: 500
8064.5000
Epoch 539/4000
6/6 [==============================] - 0s 217us/sample - loss: 497
1583.0000
```

```
Epoch 540/4000
6/6 [==============================] - 0s 270us/sample - loss: 493
5360.5000
Epoch 541/4000
6/6 [==============================] - 0s 295us/sample - loss: 489
9409.5000
Epoch 542/4000
6/6 [==============================] - 0s 14ms/sample - loss: 4863
719.5000
Epoch 543/4000
6/6 [==============================] - 0s 245us/sample - loss: 482
8293.5000
Epoch 544/4000
6/6 [==============================] - 0s 218us/sample - loss: 479
3125.5000
Epoch 545/4000
6/6 [==============================] - 0s 258us/sample - loss: 475
8200.5000
Epoch 546/4000
6/6 [==============================] - 0s 251us/sample - loss: 472
3509.5000
Epoch 547/4000
6/6 [==============================] - 0s 247us/sample - loss: 468
9090.5000
Epoch 548/4000
6/6 [==============================] - 0s 224us/sample - loss: 465
4931.0000
Epoch 549/4000
6/6 [==============================] - 0s 213us/sample - loss: 462
1025.5000
Epoch 550/4000
6/6 [==============================] - 0s 251us/sample - loss: 458
7340.0000
Epoch 551/4000
6/6 [==============================] - 0s 242us/sample - loss: 455
3920.5000
Epoch 552/4000
6/6 [==============================] - 0s 248us/sample - loss: 452
0753.5000
Epoch 553/4000
6/6 [==============================] - 0s 13ms/sample - loss: 4487
814.5000
Epoch 554/4000
6/6 [==============================] - 0s 267us/sample - loss: 445
5121.0000
Epoch 555/4000
6/6 [==============================] - 0s 221us/sample - loss: 442
2664.0000
Epoch 556/4000
6/6 [==============================] - 0s 285us/sample - loss: 439
0448.5000
Epoch 557/4000
6/6 [==============================] - 0s 261us/sample - loss: 435
8452.5000
Epoch 558/4000
6/6 [==============================] - 0s 217us/sample - loss: 432
6714.0000
```

```
Epoch 559/4000
6/6 [==============================] - 0s 249us/sample - loss: 429
5172.0000
Epoch 560/4000
6/6 [==============================] - 0s 207us/sample - loss: 426
3881.5000
Epoch 561/4000
6/6 [==============================] - 0s 214us/sample - loss: 423
2826.5000
Epoch 562/4000
6/6 [==============================] - 0s 199us/sample - loss: 420
1989.5000
Epoch 563/4000
6/6 [==============================] - 0s 14ms/sample - loss: 4171
376.7500
Epoch 564/4000
6/6 [==============================] - 0s 268us/sample - loss: 414
0970.7500
Epoch 565/4000
6/6 [==============================] - 0s 216us/sample - loss: 411
0793.0000
Epoch 566/4000
6/6 [==============================] - 0s 226us/sample - loss: 408
0870.0000
Epoch 567/4000
6/6 [==============================] - 0s 255us/sample - loss: 405
1141.7500
Epoch 568/4000
6/6 [==============================] - 0s 227us/sample - loss: 402
1595.2500
Epoch 569/4000
6/6 [==============================] - 0s 219us/sample - loss: 399
2299.0000
Epoch 570/4000
6/6 [==============================] - 0s 196us/sample - loss: 396
3238.7500
Epoch 571/4000
6/6 [==============================] - 0s 283us/sample - loss: 393
4347.2500
Epoch 572/4000
6/6 [==============================] - 0s 244us/sample - loss: 390
5686.0000
Epoch 573/4000
6/6 [==============================] - 0s 258us/sample - loss: 387
7238.2500
Epoch 574/4000
6/6 [==============================] - 0s 13ms/sample - loss: 3848
979.2500
Epoch 575/4000
6/6 [==============================] - 0s 349us/sample - loss: 382
0953.0000
Epoch 576/4000
6/6 [==============================] - 0s 280us/sample - loss: 379
3121.0000
Epoch 577/4000
6/6 [==============================] - 0s 309us/sample - loss: 376
5482.0000
```

```
Epoch 578/4000
6/6 [==============================] - 0s 257us/sample - loss: 373
8028.2500
Epoch 579/4000
6/6 [==============================] - 0s 208us/sample - loss: 371
0808.2500
Epoch 580/4000
6/6 [==============================] - 0s 209us/sample - loss: 368
3766.0000
Epoch 581/4000
6/6 [==============================] - 0s 220us/sample - loss: 365
6929.2500
Epoch 582/4000
6/6 [==============================] - 0s 246us/sample - loss: 363
0279.7500
Epoch 583/4000
6/6 [==============================] - 0s 208us/sample - loss: 360
3838.0000
Epoch 584/4000
6/6 [==============================] - 0s 284us/sample - loss: 357
7598.0000
Epoch 585/4000
6/6 [==============================] - 0s 247us/sample - loss: 355
1510.7500
Epoch 586/4000
6/6 [==============================] - 0s 237us/sample - loss: 352
5641.2500
Epoch 587/4000
6/6 [==============================] - 0s 221us/sample - loss: 349
9959.0000
Epoch 588/4000
6/6 [==============================] - 0s 270us/sample - loss: 347
4452.2500
Epoch 589/4000
6/6 [==============================] - 0s 224us/sample - loss: 344
9150.2500
Epoch 590/4000
6/6 [==============================] - 0s 264us/sample - loss: 342
4008.7500
Epoch 591/4000
6/6 [==============================] - 0s 199us/sample - loss: 339
9081.7500
Epoch 592/4000
6/6 [==============================] - 0s 245us/sample - loss: 337
4297.2500
Epoch 593/4000
6/6 [==============================] - 0s 246us/sample - loss: 334
9719.7500
Epoch 594/4000
6/6 [==============================] - 0s 297us/sample - loss: 332
5313.2500
Epoch 595/4000
6/6 [==============================] - 0s 255us/sample - loss: 330
1101.7500
Epoch 596/4000
6/6 [==============================] - 0s 241us/sample - loss: 327
7019.7500
```

```
Epoch 597/4000
6/6 [==============================] - 0s 260us/sample - loss: 325
3156.7500
Epoch 598/4000
6/6 [==============================] - 0s 211us/sample - loss: 322
9449.0000
Epoch 599/4000
6/6 [==============================] - 0s 245us/sample - loss: 320
5932.2500
Epoch 600/4000
6/6 [==============================] - 0s 257us/sample - loss: 318
2574.7500
Epoch 601/4000
6/6 [==============================] - 0s 245us/sample - loss: 315
9378.0000
Epoch 602/4000
6/6 [==============================] - 0s 245us/sample - loss: 313
6384.2500
Epoch 603/4000
6/6 [==============================] - 0s 261us/sample - loss: 311
3521.2500
Epoch 604/4000
6/6 [==============================] - 0s 212us/sample - loss: 309
0838.0000
Epoch 605/4000
6/6 [==============================] - 0s 13ms/sample - loss: 3068
313.0000
Epoch 606/4000
6/6 [==============================] - 0s 261us/sample - loss: 304
5954.2500
Epoch 607/4000
6/6 [==============================] - 0s 247us/sample - loss: 302
3776.7500
Epoch 608/4000
6/6 [==============================] - 0s 259us/sample - loss: 300
1743.7500
Epoch 609/4000
6/6 [==============================] - 0s 212us/sample - loss: 297
9871.0000
Epoch 610/4000
6/6 [==============================] - 0s 217us/sample - loss: 295
8178.0000
Epoch 611/4000
6/6 [==============================] - 0s 249us/sample - loss: 293
6605.0000
Epoch 612/4000
6/6 [==============================] - 0s 258us/sample - loss: 291
5221.2500
Epoch 613/4000
6/6 [==============================] - 0s 206us/sample - loss: 289
3976.7500
Epoch 614/4000
6/6 [==============================] - 0s 272us/sample - loss: 287
2898.7500
Epoch 615/4000
6/6 [==============================] - 0s 257us/sample - loss: 285
1962.2500
```

```
Epoch 616/4000
6/6 [==============================] - 0s 13ms/sample - loss: 2831
193.2500
Epoch 617/4000
6/6 [==============================] - 0s 326us/sample - loss: 281
0561.2500
Epoch 618/4000
6/6 [==============================] - 0s 233us/sample - loss: 279
0087.2500
Epoch 619/4000
6/6 [==============================] - 0s 220us/sample - loss: 276
9768.5000
Epoch 620/4000
6/6 [==============================] - 0s 262us/sample - loss: 274
9595.0000
Epoch 621/4000
6/6 [==============================] - 0s 263us/sample - loss: 272
9555.7500
Epoch 622/4000
6/6 [==============================] - 0s 253us/sample - loss: 270
9669.2500
Epoch 623/4000
6/6 [==============================] - 0s 281us/sample - loss: 268
9915.7500
Epoch 624/4000
6/6 [==============================] - 0s 245us/sample - loss: 267
0328.0000
Epoch 625/4000
6/6 [==============================] - 0s 245us/sample - loss: 265
0864.0000
Epoch 626/4000
6/6 [==============================] - 0s 214us/sample - loss: 263
1551.7500
Epoch 627/4000
6/6 [==============================] - 0s 13ms/sample - loss: 2612
383.2500
Epoch 628/4000
6/6 [==============================] - 0s 272us/sample - loss: 259
3361.0000
Epoch 629/4000
6/6 [==============================] - 0s 222us/sample - loss: 257
4448.2500
Epoch 630/4000
6/6 [==============================] - 0s 228us/sample - loss: 255
5687.7500
Epoch 631/4000
6/6 [==============================] - 0s 225us/sample - loss: 253
7093.2500
Epoch 632/4000
6/6 [==============================] - 0s 221us/sample - loss: 251
8603.0000
Epoch 633/4000
6/6 [==============================] - 0s 215us/sample - loss: 250
0235.7500
Epoch 634/4000
6/6 [==============================] - 0s 216us/sample - loss: 248
2025.2500
```

```
Epoch 635/4000
6/6 [==============================] - 0s 261us/sample - loss: 246
3943.0000
Epoch 636/4000
6/6 [==============================] - 0s 211us/sample - loss: 244
6007.7500
Epoch 637/4000
6/6 [==============================] - 0s 239us/sample - loss: 242
8177.5000
Epoch 638/4000
6/6 [==============================] - 0s 223us/sample - loss: 241
0484.5000
Epoch 639/4000
6/6 [==============================] - 0s 13ms/sample - loss: 2392
919.0000
Epoch 640/4000
6/6 [==============================] - 0s 285us/sample - loss: 237
5491.0000
Epoch 641/4000
6/6 [==============================] - 0s 228us/sample - loss: 235
8184.0000
Epoch 642/4000
6/6 [==============================] - 0s 292us/sample - loss: 234
0991.5000
Epoch 643/4000
6/6 [==============================] - 0s 276us/sample - loss: 232
3930.2500
Epoch 644/4000
6/6 [==============================] - 0s 229us/sample - loss: 230
7009.7500
Epoch 645/4000
6/6 [==============================] - 0s 234us/sample - loss: 229
0198.2500
Epoch 646/4000
6/6 [==============================] - 0s 324us/sample - loss: 227
3524.5000
Epoch 647/4000
6/6 [==============================] - 0s 275us/sample - loss: 225
6941.2500
Epoch 648/4000
6/6 [==============================] - 0s 265us/sample - loss: 224
0490.0000
Epoch 649/4000
6/6 [==============================] - 0s 223us/sample - loss: 222
4179.5000
Epoch 650/4000
6/6 [==============================] - 0s 220us/sample - loss: 220
7979.2500
Epoch 651/4000
6/6 [==============================] - 0s 239us/sample - loss: 219
1897.0000
Epoch 652/4000
6/6 [==============================] - 0s 232us/sample - loss: 217
5929.0000
Epoch 653/4000
6/6 [==============================] - 0s 12ms/sample - loss: 2160
060.7500
```

```
Epoch 654/4000
6/6 [==============================] - 0s 301us/sample - loss: 214
4341.2500
Epoch 655/4000
6/6 [==============================] - 0s 220us/sample - loss: 212
8699.2500
Epoch 656/4000
6/6 [==============================] - 0s 235us/sample - loss: 211
3197.7500
Epoch 657/4000
6/6 [==============================] - 0s 245us/sample - loss: 209
7805.0000
Epoch 658/4000
6/6 [==============================] - 0s 276us/sample - loss: 208
2510.8750
Epoch 659/4000
6/6 [==============================] - 0s 274us/sample - loss: 206
7359.0000
Epoch 660/4000
6/6 [==============================] - 0s 218us/sample - loss: 205
2285.0000
Epoch 661/4000
6/6 [==============================] - 0s 284us/sample - loss: 203
7332.3750
Epoch 662/4000
6/6 [==============================] - 0s 14ms/sample - loss: 2022
500.6250
Epoch 663/4000
6/6 [==============================] - 0s 265us/sample - loss: 200
7744.8750
Epoch 664/4000
6/6 [==============================] - 0s 225us/sample - loss: 199
3132.6250
Epoch 665/4000
6/6 [==============================] - 0s 265us/sample - loss: 197
8596.3750
Epoch 666/4000
6/6 [==============================] - 0s 274us/sample - loss: 196
4192.3750
Epoch 667/4000
6/6 [==============================] - 0s 247us/sample - loss: 194
9874.5000
Epoch 668/4000
6/6 [==============================] - 0s 257us/sample - loss: 193
5665.1250
Epoch 669/4000
6/6 [==============================] - 0s 190us/sample - loss: 192
1573.3750
Epoch 670/4000
6/6 [==============================] - 0s 282us/sample - loss: 190
7563.0000
Epoch 671/4000
6/6 [==============================] - 0s 14ms/sample - loss: 1893
660.3750
Epoch 672/4000
6/6 [==============================] - 0s 237us/sample - loss: 187
9867.6250
```

```
Epoch 673/4000
6/6 [==============================] - 0s 213us/sample - loss: 186
6177.5000
Epoch 674/4000
6/6 [==============================] - 0s 239us/sample - loss: 185
2591.3750
Epoch 675/4000
6/6 [==============================] - 0s 282us/sample - loss: 183
9076.5000
Epoch 676/4000
6/6 [==============================] - 0s 264us/sample - loss: 182
5687.0000
Epoch 677/4000
6/6 [==============================] - 0s 223us/sample - loss: 181
2388.1250
Epoch 678/4000
6/6 [==============================] - 0s 219us/sample - loss: 179
9186.8750
Epoch 679/4000
6/6 [==============================] - 0s 14ms/sample - loss: 1786
087.6250
Epoch 680/4000
6/6 [==============================] - 0s 279us/sample - loss: 177
3058.3750
Epoch 681/4000
6/6 [==============================] - 0s 218us/sample - loss: 176
0147.0000
Epoch 682/4000
6/6 [==============================] - 0s 240us/sample - loss: 174
7318.3750
Epoch 683/4000
6/6 [==============================] - 0s 234us/sample - loss: 173
4582.0000
Epoch 684/4000
6/6 [==============================] - 0s 247us/sample - loss: 172
1963.5000
Epoch 685/4000
6/6 [==============================] - 0s 262us/sample - loss: 170
9400.5000
Epoch 686/4000
6/6 [==============================] - 0s 281us/sample - loss: 169
6949.3750
Epoch 687/4000
6/6 [==============================] - 0s 214us/sample - loss: 168
4593.3750
Epoch 688/4000
6/6 [==============================] - 0s 233us/sample - loss: 167
2312.5000
Epoch 689/4000
6/6 [==============================] - 0s 250us/sample - loss: 166
0144.5000
Epoch 690/4000
6/6 [==============================] - 0s 246us/sample - loss: 164
8044.3750
Epoch 691/4000
6/6 [==============================] - 0s 222us/sample - loss: 163
6022.6250
```

```
Epoch 692/4000
6/6 [==============================] - 0s 265us/sample - loss: 162
4110.1250
Epoch 693/4000
6/6 [==============================] - 0s 219us/sample - loss: 161
2278.3750
Epoch 694/4000
6/6 [==============================] - 0s 262us/sample - loss: 160
0532.8750
Epoch 695/4000
6/6 [==============================] - 0s 218us/sample - loss: 158
8879.8750
Epoch 696/4000
6/6 [==============================] - 0s 284us/sample - loss: 157
7301.8750
Epoch 697/4000
6/6 [==============================] - 0s 255us/sample - loss: 156
5812.3750
Epoch 698/4000
6/6 [==============================] - 0s 271us/sample - loss: 155
4397.6250
Epoch 699/4000
6/6 [==============================] - 0s 276us/sample - loss: 154
3081.0000
Epoch 700/4000
6/6 [==============================] - 0s 249us/sample - loss: 153
1845.5000
Epoch 701/4000
6/6 [==============================] - 0s 225us/sample - loss: 152
0676.3750
Epoch 702/4000
6/6 [==============================] - 0s 228us/sample - loss: 150
9588.3750
Epoch 703/4000
6/6 [==============================] - 0s 213us/sample - loss: 149
8592.8750
Epoch 704/4000
6/6 [==============================] - 0s 249us/sample - loss: 148
7674.6250
Epoch 705/4000
6/6 [==============================] - 0s 229us/sample - loss: 147
6842.8750
Epoch 706/4000
6/6 [==============================] - 0s 13ms/sample - loss: 1466
090.3750
Epoch 707/4000
6/6 [==============================] - 0s 249us/sample - loss: 145
5401.1250
Epoch 708/4000
6/6 [==============================] - 0s 219us/sample - loss: 144
4797.6250
Epoch 709/4000
6/6 [==============================] - 0s 228us/sample - loss: 143
4277.0000
Epoch 710/4000
6/6 [==============================] - 0s 235us/sample - loss: 142
3819.5000
```

```
Epoch 711/4000
6/6 [==============================] - 0s 241us/sample - loss: 141
3451.1250
Epoch 712/4000
6/6 [==============================] - 0s 309us/sample - loss: 140
3148.5000
Epoch 713/4000
6/6 [==============================] - 0s 216us/sample - loss: 139
2925.7500
Epoch 714/4000
6/6 [==============================] - 0s 247us/sample - loss: 138
2782.7500
Epoch 715/4000
6/6 [==============================] - 0s 262us/sample - loss: 137
2707.1250
Epoch 716/4000
6/6 [==============================] - 0s 237us/sample - loss: 136
2706.2500
Epoch 717/4000
6/6 [==============================] - 0s 13ms/sample - loss: 1352
772.8750
Epoch 718/4000
6/6 [==============================] - 0s 250us/sample - loss: 134
2916.0000
Epoch 719/4000
6/6 [==============================] - 0s 259us/sample - loss: 133
3131.5000
Epoch 720/4000
6/6 [==============================] - 0s 279us/sample - loss: 132
3421.2500
Epoch 721/4000
6/6 [==============================] - 0s 283us/sample - loss: 131
3789.6250
Epoch 722/4000
6/6 [==============================] - 0s 227us/sample - loss: 130
4210.0000
Epoch 723/4000
6/6 [==============================] - 0s 220us/sample - loss: 129
4709.1250
Epoch 724/4000
6/6 [==============================] - 0s 237us/sample - loss: 128
5286.3750
Epoch 725/4000
6/6 [==============================] - 0s 211us/sample - loss: 127
5914.6250
Epoch 726/4000
6/6 [==============================] - 0s 206us/sample - loss: 126
6620.5000
Epoch 727/4000
6/6 [==============================] - 0s 14ms/sample - loss: 1257
381.1250
Epoch 728/4000
6/6 [==============================] - 0s 249us/sample - loss: 124
8225.6250
Epoch 729/4000
6/6 [==============================] - 0s 210us/sample - loss: 123
9137.1250
```

```
Epoch 730/4000
6/6 [==============================] - 0s 271us/sample - loss: 123
0116.1250
Epoch 731/4000
6/6 [==============================] - 0s 240us/sample - loss: 122
1149.8750
Epoch 732/4000
6/6 [==============================] - 0s 241us/sample - loss: 121
2253.2500
Epoch 733/4000
6/6 [==============================] - 0s 199us/sample - loss: 120
3410.6250
Epoch 734/4000
6/6 [==============================] - 0s 213us/sample - loss: 119
4646.8750
Epoch 735/4000
6/6 [==============================] - 0s 295us/sample - loss: 118
5942.3750
Epoch 736/4000
6/6 [==============================] - 0s 204us/sample - loss: 117
7306.5000
Epoch 737/4000
6/6 [==============================] - 0s 215us/sample - loss: 116
8734.6250
Epoch 738/4000
6/6 [==============================] - 0s 267us/sample - loss: 116
0205.8750
Epoch 739/4000
6/6 [==============================] - 0s 244us/sample - loss: 115
1767.3750
Epoch 740/4000
6/6 [==============================] - 0s 255us/sample - loss: 114
3358.3750
Epoch 741/4000
6/6 [==============================] - 0s 280us/sample - loss: 113
5039.5000
Epoch 742/4000
6/6 [==============================] - 0s 232us/sample - loss: 112
6778.6250
Epoch 743/4000
6/6 [==============================] - 0s 272us/sample - loss: 111
8560.1250
Epoch 744/4000
6/6 [==============================] - 0s 282us/sample - loss: 111
0410.5000
Epoch 745/4000
6/6 [==============================] - 0s 248us/sample - loss: 110
2310.3750
Epoch 746/4000
6/6 [==============================] - 0s 214us/sample - loss: 109
4282.2500
Epoch 747/4000
6/6 [==============================] - 0s 14ms/sample - loss: 1086
306.8750
Epoch 748/4000
6/6 [==============================] - 0s 261us/sample - loss: 107
8403.0000
```

```
Epoch 749/4000
6/6 [==============================] - 0s 252us/sample - loss: 107
0531.1250
Epoch 750/4000
6/6 [==============================] - 0s 239us/sample - loss: 106
2743.7500
Epoch 751/4000
6/6 [==============================] - 0s 255us/sample - loss: 105
4988.0000
Epoch 752/4000
6/6 [==============================] - 0s 213us/sample - loss: 104
7311.7500
Epoch 753/4000
6/6 [==============================] - 0s 280us/sample - loss: 103
9666.6875
Epoch 754/4000
6/6 [==============================] - 0s 212us/sample - loss: 103
2104.3125
Epoch 755/4000
6/6 [==============================] - 0s 206us/sample - loss: 102
4574.6875
Epoch 756/4000
6/6 [==============================] - 0s 203us/sample - loss: 101
7110.0000
Epoch 757/4000
6/6 [==============================] - 0s 208us/sample - loss: 100
9697.0625
Epoch 758/4000
6/6 [==============================] - 0s 14ms/sample - loss: 1002
351.7500
Epoch 759/4000
6/6 [==============================] - 0s 276us/sample - loss: 995
036.6875
Epoch 760/4000
6/6 [==============================] - 0s 305us/sample - loss: 987
795.7500
Epoch 761/4000
6/6 [==============================] - 0s 216us/sample - loss: 980
605.9375
Epoch 762/4000
6/6 [==============================] - 0s 223us/sample - loss: 973
450.8125
Epoch 763/4000
6/6 [==============================] - 0s 218us/sample - loss: 966
366.0000
Epoch 764/4000
6/6 [==============================] - 0s 218us/sample - loss: 959
324.6875
Epoch 765/4000
6/6 [==============================] - 0s 287us/sample - loss: 952
328.7500
Epoch 766/4000
6/6 [==============================] - 0s 254us/sample - loss: 945
399.8125
Epoch 767/4000
6/6 [==============================] - 0s 224us/sample - loss: 938
506.1875
```

```
Epoch 768/4000
6/6 [==============================] - 0s 254us/sample - loss: 931
668.6875
Epoch 769/4000
6/6 [==============================] - 0s 250us/sample - loss: 924
880.1875
Epoch 770/4000
6/6 [==============================] - 0s 230us/sample - loss: 918
140.4375
Epoch 771/4000
6/6 [==============================] - 0s 265us/sample - loss: 911
447.1875
Epoch 772/4000
6/6 [==============================] - 0s 224us/sample - loss: 904
816.8125
Epoch 773/4000
6/6 [==============================] - 0s 270us/sample - loss: 898
218.0625
Epoch 774/4000
6/6 [==============================] - 0s 239us/sample - loss: 891
688.5625
Epoch 775/4000
6/6 [==============================] - 0s 214us/sample - loss: 885
184.8125
Epoch 776/4000
6/6 [==============================] - 0s 14ms/sample - loss: 8787
37.7500
Epoch 777/4000
6/6 [==============================] - 0s 317us/sample - loss: 872
334.6875
Epoch 778/4000
6/6 [==============================] - 0s 235us/sample - loss: 865
981.0000
Epoch 779/4000
6/6 [==============================] - 0s 223us/sample - loss: 859
660.8125
Epoch 780/4000
6/6 [==============================] - 0s 258us/sample - loss: 853
402.2500
Epoch 781/4000
6/6 [==============================] - 0s 287us/sample - loss: 847
185.0000
Epoch 782/4000
6/6 [==============================] - 0s 228us/sample - loss: 841
017.2500
Epoch 783/4000
6/6 [==============================] - 0s 211us/sample - loss: 834
885.4375
Epoch 784/4000
6/6 [==============================] - 0s 282us/sample - loss: 828
801.3125
Epoch 785/4000
6/6 [==============================] - 0s 233us/sample - loss: 822
768.3125
Epoch 786/4000
6/6 [==============================] - 0s 282us/sample - loss: 816
769.3125
```

```
Epoch 787/4000
6/6 [==============================] - 0s 13ms/sample - loss: 8108
26.7500
Epoch 788/4000
6/6 [==============================] - 0s 297us/sample - loss: 804
916.8125
Epoch 789/4000
6/6 [==============================] - 0s 243us/sample - loss: 799
053.3125
Epoch 790/4000
6/6 [==============================] - 0s 306us/sample - loss: 793
230.8125
Epoch 791/4000
6/6 [==============================] - 0s 262us/sample - loss: 787
451.0625
Epoch 792/4000
6/6 [==============================] - 0s 229us/sample - loss: 781
714.5000
Epoch 793/4000
6/6 [==============================] - 0s 255us/sample - loss: 776
014.0000
Epoch 794/4000
6/6 [==============================] - 0s 208us/sample - loss: 770
363.2500
Epoch 795/4000
6/6 [==============================] - 0s 228us/sample - loss: 764
742.6875
Epoch 796/4000
6/6 [==============================] - 0s 211us/sample - loss: 759
172.3125
Epoch 797/4000
6/6 [==============================] - 0s 375us/sample - loss: 753
642.6875
Epoch 798/4000
6/6 [==============================] - 0s 245us/sample - loss: 748
153.9375
Epoch 799/4000
6/6 [==============================] - 0s 245us/sample - loss: 742
704.1875
Epoch 800/4000
6/6 [==============================] - 0s 222us/sample - loss: 737
293.5000
Epoch 801/4000
6/6 [==============================] - 0s 223us/sample - loss: 731
922.0000
Epoch 802/4000
6/6 [==============================] - 0s 255us/sample - loss: 726
589.1875
Epoch 803/4000
6/6 [==============================] - 0s 207us/sample - loss: 721
294.4375
Epoch 804/4000
6/6 [==============================] - 0s 257us/sample - loss: 716
038.0000
Epoch 805/4000
6/6 [==============================] - 0s 212us/sample - loss: 710
829.8125
```

```
Epoch 806/4000
6/6 [==============================] - 0s 223us/sample - loss: 705
646.5625
Epoch 807/4000
6/6 [==============================] - 0s 272us/sample - loss: 700
508.0625
Epoch 808/4000
6/6 [==============================] - 0s 230us/sample - loss: 695
405.7500
Epoch 809/4000
6/6 [==============================] - 0s 277us/sample - loss: 690
342.5625
Epoch 810/4000
6/6 [==============================] - 0s 208us/sample - loss: 685
308.5625
Epoch 811/4000
6/6 [==============================] - 0s 251us/sample - loss: 680
309.1875
Epoch 812/4000
6/6 [==============================] - 0s 206us/sample - loss: 675
355.4375
Epoch 813/4000
6/6 [==============================] - 0s 220us/sample - loss: 670
439.0625
Epoch 814/4000
6/6 [==============================] - 0s 217us/sample - loss: 665
552.8750
Epoch 815/4000
6/6 [==============================] - 0s 232us/sample - loss: 660
705.6875
Epoch 816/4000
6/6 [==============================] - 0s 253us/sample - loss: 655
889.9375
Epoch 817/4000
6/6 [==============================] - 0s 14ms/sample - loss: 6511
17.0000
Epoch 818/4000
6/6 [==============================] - 0s 246us/sample - loss: 646
374.6875
Epoch 819/4000
6/6 [==============================] - 0s 235us/sample - loss: 641
666.1875
Epoch 820/4000
6/6 [==============================] - 0s 237us/sample - loss: 636
986.2500
Epoch 821/4000
6/6 [==============================] - 0s 239us/sample - loss: 632
339.5000
Epoch 822/4000
6/6 [==============================] - 0s 211us/sample - loss: 627
734.7500
Epoch 823/4000
6/6 [==============================] - 0s 212us/sample - loss: 623
155.1250
Epoch 824/4000
6/6 [==============================] - 0s 233us/sample - loss: 618
619.5625
```

```
Epoch 825/4000
6/6 [==============================] - 0s 243us/sample - loss: 614
111.8125
Epoch 826/4000
6/6 [==============================] - 0s 221us/sample - loss: 609
642.0000
Epoch 827/4000
6/6 [==============================] - 0s 14ms/sample - loss: 6052
04.8125
Epoch 828/4000
6/6 [==============================] - 0s 261us/sample - loss: 600
790.8125
Epoch 829/4000
6/6 [==============================] - 0s 223us/sample - loss: 596
414.5625
Epoch 830/4000
6/6 [==============================] - 0s 205us/sample - loss: 592
069.2500
Epoch 831/4000
6/6 [==============================] - 0s 281us/sample - loss: 587
759.0000
Epoch 832/4000
6/6 [==============================] - 0s 246us/sample - loss: 583
474.0625
Epoch 833/4000
6/6 [==============================] - 0s 240us/sample - loss: 579
223.9375
Epoch 834/4000
6/6 [==============================] - 0s 234us/sample - loss: 574
997.4375
Epoch 835/4000
6/6 [==============================] - 0s 293us/sample - loss: 570
810.7500
Epoch 836/4000
6/6 [==============================] - 0s 232us/sample - loss: 566
654.5625
Epoch 837/4000
6/6 [==============================] - 0s 14ms/sample - loss: 5625
23.6875
Epoch 838/4000
6/6 [==============================] - 0s 266us/sample - loss: 558
426.3125
Epoch 839/4000
6/6 [==============================] - 0s 258us/sample - loss: 554
363.1875
Epoch 840/4000
6/6 [==============================] - 0s 308us/sample - loss: 550
318.6875
Epoch 841/4000
6/6 [==============================] - 0s 234us/sample - loss: 546
314.3750
Epoch 842/4000
6/6 [==============================] - 0s 253us/sample - loss: 542
329.1875
Epoch 843/4000
6/6 [==============================] - 0s 279us/sample - loss: 538
383.2500
```

```
Epoch 844/4000
6/6 [==============================] - 0s 228us/sample - loss: 534
456.0625
Epoch 845/4000
6/6 [==============================] - 0s 264us/sample - loss: 530
560.5625
Epoch 846/4000
6/6 [==============================] - 0s 242us/sample - loss: 526
697.0625
Epoch 847/4000
6/6 [==============================] - 0s 264us/sample - loss: 522
867.3750
Epoch 848/4000
6/6 [==============================] - 0s 231us/sample - loss: 519
052.9688
Epoch 849/4000
6/6 [==============================] - 0s 238us/sample - loss: 515
272.5938
Epoch 850/4000
6/6 [==============================] - 0s 300us/sample - loss: 511
520.4062
Epoch 851/4000
6/6 [==============================] - 0s 276us/sample - loss: 507
788.3438
Epoch 852/4000
6/6 [==============================] - 0s 223us/sample - loss: 504
086.5938
Epoch 853/4000
6/6 [==============================] - 0s 214us/sample - loss: 500
415.8750
Epoch 854/4000
6/6 [==============================] - 0s 259us/sample - loss: 496
765.2500
Epoch 855/4000
6/6 [==============================] - 0s 238us/sample - loss: 493
148.4688
Epoch 856/4000
6/6 [==============================] - 0s 233us/sample - loss: 489
557.7500
Epoch 857/4000
6/6 [==============================] - 0s 256us/sample - loss: 485
988.4062
Epoch 858/4000
6/6 [==============================] - 0s 243us/sample - loss: 482
450.8438
Epoch 859/4000
6/6 [==============================] - 0s 228us/sample - loss: 478
932.7500
Epoch 860/4000
6/6 [==============================] - 0s 260us/sample - loss: 475
447.8750
Epoch 861/4000
6/6 [==============================] - 0s 226us/sample - loss: 471
982.2500
Epoch 862/4000
6/6 [==============================] - 0s 243us/sample - loss: 468
544.7500
```

```
Epoch 863/4000
6/6 [==============================] - 0s 253us/sample - loss: 465
128.0312
Epoch 864/4000
6/6 [==============================] - 0s 293us/sample - loss: 461
735.7188
Epoch 865/4000
6/6 [==============================] - 0s 244us/sample - loss: 458
376.0000
Epoch 866/4000
6/6 [==============================] - 0s 223us/sample - loss: 455
034.6562
Epoch 867/4000
6/6 [==============================] - 0s 343us/sample - loss: 451
722.2188
Epoch 868/4000
6/6 [==============================] - 0s 276us/sample - loss: 448
427.4062
Epoch 869/4000
6/6 [==============================] - 0s 251us/sample - loss: 445
160.8750
Epoch 870/4000
6/6 [==============================] - 0s 230us/sample - loss: 441
924.0000
Epoch 871/4000
6/6 [==============================] - 0s 255us/sample - loss: 438
701.0938
Epoch 872/4000
6/6 [==============================] - 0s 238us/sample - loss: 435
500.7188
Epoch 873/4000
6/6 [==============================] - 0s 211us/sample - loss: 432
332.7500
Epoch 874/4000
6/6 [==============================] - 0s 295us/sample - loss: 429
183.7500
Epoch 875/4000
6/6 [==============================] - 0s 258us/sample - loss: 426
054.7500
Epoch 876/4000
6/6 [==============================] - 0s 14ms/sample - loss: 4229
55.3438
Epoch 877/4000
6/6 [==============================] - 0s 314us/sample - loss: 419
874.6562
Epoch 878/4000
6/6 [==============================] - 0s 269us/sample - loss: 416
816.0312
Epoch 879/4000
6/6 [==============================] - 0s 240us/sample - loss: 413
779.0000
Epoch 880/4000
6/6 [==============================] - 0s 247us/sample - loss: 410
763.0000
Epoch 881/4000
6/6 [==============================] - 0s 245us/sample - loss: 407
765.0312
```

```
Epoch 882/4000
6/6 [==============================] - 0s 278us/sample - loss: 404
792.4062
Epoch 883/4000
6/6 [==============================] - 0s 219us/sample - loss: 401
849.6562
Epoch 884/4000
6/6 [==============================] - 0s 280us/sample - loss: 398
919.6562
Epoch 885/4000
6/6 [==============================] - 0s 14ms/sample - loss: 3960
17.6562
Epoch 886/4000
6/6 [==============================] - 0s 300us/sample - loss: 393
129.9688
Epoch 887/4000
6/6 [==============================] - 0s 255us/sample - loss: 390
267.3438
Epoch 888/4000
6/6 [==============================] - 0s 278us/sample - loss: 387
424.7188
Epoch 889/4000
6/6 [==============================] - 0s 246us/sample - loss: 384
607.8750
Epoch 890/4000
6/6 [==============================] - 0s 201us/sample - loss: 381
803.2188
Epoch 891/4000
6/6 [==============================] - 0s 227us/sample - loss: 379
020.7188
Epoch 892/4000
6/6 [==============================] - 0s 242us/sample - loss: 376
254.6250
Epoch 893/4000
6/6 [==============================] - 0s 214us/sample - loss: 373
518.6562
Epoch 894/4000
6/6 [==============================] - 0s 278us/sample - loss: 370
795.7188
Epoch 895/4000
6/6 [==============================] - 0s 264us/sample - loss: 368
094.5000
Epoch 896/4000
6/6 [==============================] - 0s 269us/sample - loss: 365
412.4062
Epoch 897/4000
6/6 [==============================] - 0s 239us/sample - loss: 362
749.2500
Epoch 898/4000
6/6 [==============================] - 0s 237us/sample - loss: 360
106.4062
Epoch 899/4000
6/6 [==============================] - 0s 259us/sample - loss: 357
481.6562
Epoch 900/4000
6/6 [==============================] - 0s 222us/sample - loss: 354
878.1562
```

```
Epoch 901/4000
6/6 [==============================] - 0s 209us/sample - loss: 352
296.1562
Epoch 902/4000
6/6 [==============================] - 0s 196us/sample - loss: 349
729.4062
Epoch 903/4000
6/6 [==============================] - 0s 248us/sample - loss: 347
179.2812
Epoch 904/4000
6/6 [==============================] - 0s 211us/sample - loss: 344
651.4688
Epoch 905/4000
6/6 [==============================] - 0s 14ms/sample - loss: 3421
36.3750
Epoch 906/4000
6/6 [==============================] - 0s 285us/sample - loss: 339
645.7188
Epoch 907/4000
6/6 [==============================] - 0s 241us/sample - loss: 337
170.6250
Epoch 908/4000
6/6 [==============================] - 0s 235us/sample - loss: 334
714.4062
Epoch 909/4000
6/6 [==============================] - 0s 256us/sample - loss: 332
276.0312
Epoch 910/4000
6/6 [==============================] - 0s 247us/sample - loss: 329
855.4688
Epoch 911/4000
6/6 [==============================] - 0s 218us/sample - loss: 327
453.0000
Epoch 912/4000
6/6 [==============================] - 0s 199us/sample - loss: 325
068.4062
Epoch 913/4000
6/6 [==============================] - 0s 236us/sample - loss: 322
696.4375
Epoch 914/4000
6/6 [==============================] - 0s 223us/sample - loss: 320
350.5312
Epoch 915/4000
6/6 [==============================] - 0s 14ms/sample - loss: 3180
13.9375
Epoch 916/4000
6/6 [==============================] - 0s 294us/sample - loss: 315
696.5938
Epoch 917/4000
6/6 [==============================] - 0s 296us/sample - loss: 313
398.1562
Epoch 918/4000
6/6 [==============================] - 0s 275us/sample - loss: 311
119.8750
Epoch 919/4000
6/6 [==============================] - 0s 268us/sample - loss: 308
849.6562
```

```
Epoch 920/4000
6/6 [==============================] - 0s 249us/sample - loss: 306
594.8438
Epoch 921/4000
6/6 [==============================] - 0s 252us/sample - loss: 304
361.5938
Epoch 922/4000
6/6 [==============================] - 0s 211us/sample - loss: 302
148.0312
Epoch 923/4000
6/6 [==============================] - 0s 298us/sample - loss: 299
946.8438
Epoch 924/4000
6/6 [==============================] - 0s 214us/sample - loss: 297
759.8750
Epoch 925/4000
6/6 [==============================] - 0s 218us/sample - loss: 295
593.2188
Epoch 926/4000
6/6 [==============================] - 0s 290us/sample - loss: 293
439.7188
Epoch 927/4000
6/6 [==============================] - 0s 261us/sample - loss: 291
302.1562
Epoch 928/4000
6/6 [==============================] - 0s 235us/sample - loss: 289
180.2812
Epoch 929/4000
6/6 [==============================] - 0s 276us/sample - loss: 287
068.7500
Epoch 930/4000
6/6 [==============================] - 0s 231us/sample - loss: 284
977.6250
Epoch 931/4000
6/6 [==============================] - 0s 238us/sample - loss: 282
909.3438
Epoch 932/4000
6/6 [==============================] - 0s 278us/sample - loss: 280
841.1562
Epoch 933/4000
6/6 [==============================] - 0s 216us/sample - loss: 278
793.6562
Epoch 934/4000
6/6 [==============================] - 0s 213us/sample - loss: 276
768.2812
Epoch 935/4000
6/6 [==============================] - 0s 216us/sample - loss: 274
744.7500
Epoch 936/4000
6/6 [==============================] - 0s 210us/sample - loss: 272
742.3438
Epoch 937/4000
6/6 [==============================] - 0s 269us/sample - loss: 270
764.0312
Epoch 938/4000
6/6 [==============================] - 0s 305us/sample - loss: 268
788.2500
```

```
Epoch 939/4000
6/6 [==============================] - 0s 243us/sample - loss: 266
829.2188
Epoch 940/4000
6/6 [==============================] - 0s 219us/sample - loss: 264
890.0000
Epoch 941/4000
6/6 [==============================] - 0s 250us/sample - loss: 262
953.4375
Epoch 942/4000
6/6 [==============================] - 0s 268us/sample - loss: 261
040.3125
Epoch 943/4000
6/6 [==============================] - 0s 242us/sample - loss: 259
139.7969
Epoch 944/4000
6/6 [==============================] - 0s 224us/sample - loss: 257
248.7031
Epoch 945/4000
6/6 [==============================] - 0s 206us/sample - loss: 255
376.0000
Epoch 946/4000
6/6 [==============================] - 0s 205us/sample - loss: 253
519.5000
Epoch 947/4000
6/6 [==============================] - 0s 13ms/sample - loss: 2516
74.0781
Epoch 948/4000
6/6 [==============================] - 0s 241us/sample - loss: 249
836.3750
Epoch 949/4000
6/6 [==============================] - 0s 270us/sample - loss: 248
018.8906
Epoch 950/4000
6/6 [==============================] - 0s 258us/sample - loss: 246
209.3750
Epoch 951/4000
6/6 [==============================] - 0s 248us/sample - loss: 244
411.3750
Epoch 952/4000
6/6 [==============================] - 0s 274us/sample - loss: 242
636.4375
Epoch 953/4000
6/6 [==============================] - 0s 252us/sample - loss: 240
867.2969
Epoch 954/4000
6/6 [==============================] - 0s 203us/sample - loss: 239
114.5781
Epoch 955/4000
6/6 [==============================] - 0s 228us/sample - loss: 237
371.8594
Epoch 956/4000
6/6 [==============================] - 0s 230us/sample - loss: 235
643.7500
Epoch 957/4000
6/6 [==============================] - 0s 220us/sample - loss: 233
925.3750
```

```
Epoch 958/4000
6/6 [==============================] - 0s 13ms/sample - loss: 2322
22.6094
Epoch 959/4000
6/6 [==============================] - 0s 266us/sample - loss: 230
529.9844
Epoch 960/4000
6/6 [==============================] - 0s 222us/sample - loss: 228
852.2344
Epoch 961/4000
6/6 [==============================] - 0s 224us/sample - loss: 227
184.1406
Epoch 962/4000
6/6 [==============================] - 0s 233us/sample - loss: 225
522.7031
Epoch 963/4000
6/6 [==============================] - 0s 224us/sample - loss: 223
881.7344
Epoch 964/4000
6/6 [==============================] - 0s 233us/sample - loss: 222
248.2500
Epoch 965/4000
6/6 [==============================] - 0s 223us/sample - loss: 220
635.1250
Epoch 966/4000
6/6 [==============================] - 0s 285us/sample - loss: 219
027.2031
Epoch 967/4000
6/6 [==============================] - 0s 255us/sample - loss: 217
428.2500
Epoch 968/4000
6/6 [==============================] - 0s 14ms/sample - loss: 2158
49.9844
Epoch 969/4000
6/6 [==============================] - 0s 264us/sample - loss: 214
274.3750
Epoch 970/4000
6/6 [==============================] - 0s 278us/sample - loss: 212
714.8281
Epoch 971/4000
6/6 [==============================] - 0s 214us/sample - loss: 211
165.2031
Epoch 972/4000
6/6 [==============================] - 0s 251us/sample - loss: 209
629.2656
Epoch 973/4000
6/6 [==============================] - 0s 225us/sample - loss: 208
097.1875
Epoch 974/4000
6/6 [==============================] - 0s 222us/sample - loss: 206
584.5625
Epoch 975/4000
6/6 [==============================] - 0s 263us/sample - loss: 205
073.7344
Epoch 976/4000
6/6 [==============================] - 0s 14ms/sample - loss: 2035
85.4844
```

```
Epoch 977/4000
6/6 [==============================] - 0s 271us/sample - loss: 202
101.4844
Epoch 978/4000
6/6 [==============================] - 0s 214us/sample - loss: 200
625.8281
Epoch 979/4000
6/6 [==============================] - 0s 312us/sample - loss: 199
165.8281
Epoch 980/4000
6/6 [==============================] - 0s 226us/sample - loss: 197
716.0000
Epoch 981/4000
6/6 [==============================] - 0s 263us/sample - loss: 196
276.1406
Epoch 982/4000
6/6 [==============================] - 0s 265us/sample - loss: 194
846.5156
Epoch 983/4000
6/6 [==============================] - 0s 219us/sample - loss: 193
424.8750
Epoch 984/4000
6/6 [==============================] - 0s 227us/sample - loss: 192
015.8281
Epoch 985/4000
6/6 [==============================] - 0s 208us/sample - loss: 190
618.5156
Epoch 986/4000
6/6 [==============================] - 0s 203us/sample - loss: 189
228.5469
Epoch 987/4000
6/6 [==============================] - 0s 270us/sample - loss: 187
850.8281
Epoch 988/4000
6/6 [==============================] - 0s 245us/sample - loss: 186
479.6250
Epoch 989/4000
6/6 [==============================] - 0s 216us/sample - loss: 185
121.6094
Epoch 990/4000
6/6 [==============================] - 0s 277us/sample - loss: 183
774.2500
Epoch 991/4000
6/6 [==============================] - 0s 295us/sample - loss: 182
435.2656
Epoch 992/4000
6/6 [==============================] - 0s 274us/sample - loss: 181
107.6875
Epoch 993/4000
6/6 [==============================] - 0s 215us/sample - loss: 179
786.7656
Epoch 994/4000
6/6 [==============================] - 0s 219us/sample - loss: 178
477.1406
Epoch 995/4000
6/6 [==============================] - 0s 258us/sample - loss: 177
175.7031
```

```
Epoch 996/4000
6/6 [==============================] - 0s 14ms/sample - loss: 1758
84.6250
Epoch 997/4000
6/6 [==============================] - 0s 276us/sample - loss: 174
604.0156
Epoch 998/4000
6/6 [==============================] - 0s 265us/sample - loss: 173
334.5156
Epoch 999/4000
6/6 [==============================] - 0s 233us/sample - loss: 172
071.7969
Epoch 1000/4000
6/6 [==============================] - 0s 241us/sample - loss: 170
814.7500
Epoch 1001/4000
6/6 [==============================] - 0s 234us/sample - loss: 169
571.2656
Epoch 1002/4000
6/6 [==============================] - 0s 265us/sample - loss: 168
337.2969
Epoch 1003/4000
6/6 [==============================] - 0s 197us/sample - loss: 167
110.8125
Epoch 1004/4000
6/6 [==============================] - 0s 281us/sample - loss: 165
893.1094
Epoch 1005/4000
6/6 [==============================] - 0s 194us/sample - loss: 164
681.0938
Epoch 1006/4000
6/6 [==============================] - 0s 232us/sample - loss: 163
487.0781
Epoch 1007/4000
6/6 [==============================] - 0s 340us/sample - loss: 162
293.0312
Epoch 1008/4000
6/6 [==============================] - 0s 262us/sample - loss: 161
109.7969
Epoch 1009/4000
6/6 [==============================] - 0s 225us/sample - loss: 159
937.6719
Epoch 1010/4000
6/6 [==============================] - 0s 210us/sample - loss: 158
772.2031
Epoch 1011/4000
6/6 [==============================] - 0s 262us/sample - loss: 157
614.9375
Epoch 1012/4000
6/6 [==============================] - 0s 246us/sample - loss: 156
470.1094
Epoch 1013/4000
6/6 [==============================] - 0s 246us/sample - loss: 155
327.1875
Epoch 1014/4000
6/6 [==============================] - 0s 251us/sample - loss: 154
197.4688
```

```
Epoch 1015/4000
6/6 [==============================] - 0s 210us/sample - loss: 153
072.8281
Epoch 1016/4000
6/6 [==============================] - 0s 203us/sample - loss: 151
957.0469
Epoch 1017/4000
6/6 [==============================] - 0s 235us/sample - loss: 150
850.3594
Epoch 1018/4000
6/6 [==============================] - 0s 290us/sample - loss: 149
750.2500
Epoch 1019/4000
6/6 [==============================] - 0s 235us/sample - loss: 148
661.7344
Epoch 1020/4000
6/6 [==============================] - 0s 221us/sample - loss: 147
577.2500
Epoch 1021/4000
6/6 [==============================] - 0s 268us/sample - loss: 146
502.2031
Epoch 1022/4000
6/6 [==============================] - 0s 251us/sample - loss: 145
434.7031
Epoch 1023/4000
6/6 [==============================] - 0s 223us/sample - loss: 144
378.3906
Epoch 1024/4000
6/6 [==============================] - 0s 256us/sample - loss: 143
325.3281
Epoch 1025/4000
6/6 [==============================] - 0s 253us/sample - loss: 142
284.6562
Epoch 1026/4000
6/6 [==============================] - 0s 254us/sample - loss: 141
244.8281
Epoch 1027/4000
6/6 [==============================] - 0s 271us/sample - loss: 140
214.6094
Epoch 1028/4000
6/6 [==============================] - 0s 13ms/sample - loss: 1391
95.7969
Epoch 1029/4000
6/6 [==============================] - 0s 241us/sample - loss: 138
179.7812
Epoch 1030/4000
6/6 [==============================] - 0s 253us/sample - loss: 137
171.8906
Epoch 1031/4000
6/6 [==============================] - 0s 260us/sample - loss: 136
174.4375
Epoch 1032/4000
6/6 [==============================] - 0s 226us/sample - loss: 135
180.5156
Epoch 1033/4000
6/6 [==============================] - 0s 198us/sample - loss: 134
196.1094
```

```
Epoch 1034/4000
6/6 [==============================] - 0s 219us/sample - loss: 133
218.4219
Epoch 1035/4000
6/6 [==============================] - 0s 192us/sample - loss: 132
247.2656
Epoch 1036/4000
6/6 [==============================] - 0s 273us/sample - loss: 131
283.6094
Epoch 1037/4000
6/6 [==============================] - 0s 14ms/sample - loss: 1303
28.5391
Epoch 1038/4000
6/6 [==============================] - 0s 285us/sample - loss: 129
376.7266
Epoch 1039/4000
6/6 [==============================] - 0s 264us/sample - loss: 128
435.6562
Epoch 1040/4000
6/6 [==============================] - 0s 264us/sample - loss: 127
500.6953
Epoch 1041/4000
6/6 [==============================] - 0s 209us/sample - loss: 126
573.1484
Epoch 1042/4000
6/6 [==============================] - 0s 232us/sample - loss: 125
649.2188
Epoch 1043/4000
6/6 [==============================] - 0s 212us/sample - loss: 124
733.2891
Epoch 1044/4000
6/6 [==============================] - 0s 233us/sample - loss: 123
824.6641
Epoch 1045/4000
6/6 [==============================] - 0s 197us/sample - loss: 122
922.7109
Epoch 1046/4000
6/6 [==============================] - 0s 253us/sample - loss: 122
027.2266
Epoch 1047/4000
6/6 [==============================] - 0s 14ms/sample - loss: 1211
39.0703
Epoch 1048/4000
6/6 [==============================] - 0s 266us/sample - loss: 120
256.4375
Epoch 1049/4000
6/6 [==============================] - 0s 218us/sample - loss: 119
379.9766
Epoch 1050/4000
6/6 [==============================] - 0s 220us/sample - loss: 118
509.5000
Epoch 1051/4000
6/6 [==============================] - 0s 230us/sample - loss: 117
645.3438
Epoch 1052/4000
6/6 [==============================] - 0s 240us/sample - loss: 116
790.7578
```

```
Epoch 1053/4000
6/6 [==============================] - 0s 201us/sample - loss: 115
939.0234
Epoch 1054/4000
6/6 [==============================] - 0s 202us/sample - loss: 115
095.8516
Epoch 1055/4000
6/6 [==============================] - 0s 258us/sample - loss: 114
259.2188
Epoch 1056/4000
6/6 [==============================] - 0s 224us/sample - loss: 113
426.7266
Epoch 1057/4000
6/6 [==============================] - 0s 14ms/sample - loss: 1126
00.2500
Epoch 1058/4000
6/6 [==============================] - 0s 232us/sample - loss: 111
776.9766
Epoch 1059/4000
6/6 [==============================] - 0s 214us/sample - loss: 110
963.4141
Epoch 1060/4000
6/6 [==============================] - 0s 242us/sample - loss: 110
157.8750
Epoch 1061/4000
6/6 [==============================] - 0s 223us/sample - loss: 109
354.8672
Epoch 1062/4000
6/6 [==============================] - 0s 196us/sample - loss: 108
559.2500
Epoch 1063/4000
6/6 [==============================] - 0s 238us/sample - loss: 107
765.4766
Epoch 1064/4000
6/6 [==============================] - 0s 238us/sample - loss: 106
980.3672
Epoch 1065/4000
6/6 [==============================] - 0s 194us/sample - loss: 106
198.1250
Epoch 1066/4000
6/6 [==============================] - 0s 196us/sample - loss: 105
425.9141
Epoch 1067/4000
6/6 [==============================] - 0s 253us/sample - loss: 104
655.8750
Epoch 1068/4000
6/6 [==============================] - 0s 250us/sample - loss: 103
898.0000
Epoch 1069/4000
6/6 [==============================] - 0s 275us/sample - loss: 103
138.5000
Epoch 1070/4000
6/6 [==============================] - 0s 251us/sample - loss: 102
387.8750
Epoch 1071/4000
6/6 [==============================] - 0s 247us/sample - loss: 101
641.2812
```

```
Epoch 1072/4000
6/6 [==============================] - 0s 215us/sample - loss: 100
900.0625
Epoch 1073/4000
6/6 [==============================] - 0s 220us/sample - loss: 100
166.1797
Epoch 1074/4000
6/6 [==============================] - 0s 223us/sample - loss: 994
35.8516
Epoch 1075/4000
6/6 [==============================] - 0s 217us/sample - loss: 987
08.9297
Epoch 1076/4000
6/6 [==============================] - 0s 239us/sample - loss: 979
89.5078
Epoch 1077/4000
6/6 [==============================] - 0s 228us/sample - loss: 972
75.6875
Epoch 1078/4000
6/6 [==============================] - 0s 277us/sample - loss: 965
69.2812
Epoch 1079/4000
6/6 [==============================] - 0s 239us/sample - loss: 958
66.1641
Epoch 1080/4000
6/6 [==============================] - 0s 230us/sample - loss: 951
66.4688
Epoch 1081/4000
6/6 [==============================] - 0s 214us/sample - loss: 944
72.8984
Epoch 1082/4000
6/6 [==============================] - 0s 210us/sample - loss: 937
85.7812
Epoch 1083/4000
6/6 [==============================] - 0s 205us/sample - loss: 931
00.5391
Epoch 1084/4000
6/6 [==============================] - 0s 201us/sample - loss: 924
24.1641
Epoch 1085/4000
6/6 [==============================] - 0s 207us/sample - loss: 917
52.8984
Epoch 1086/4000
6/6 [==============================] - 0s 224us/sample - loss: 910
82.0234
Epoch 1087/4000
6/6 [==============================] - 0s 242us/sample - loss: 904
20.1172
Epoch 1088/4000
6/6 [==============================] - 0s 298us/sample - loss: 897
60.4766
Epoch 1089/4000
6/6 [==============================] - 0s 232us/sample - loss: 891
05.1016
Epoch 1090/4000
6/6 [==============================] - 0s 235us/sample - loss: 884
56.6016
```

```
Epoch 1091/4000
6/6 [==============================] - 0s 212us/sample - loss: 878
13.3438
Epoch 1092/4000
6/6 [==============================] - 0s 208us/sample - loss: 871
72.9688
Epoch 1093/4000
6/6 [==============================] - 0s 224us/sample - loss: 865
39.2969
Epoch 1094/4000
6/6 [==============================] - 0s 226us/sample - loss: 859
08.0000
Epoch 1095/4000
6/6 [==============================] - 0s 259us/sample - loss: 852
80.3828
Epoch 1096/4000
6/6 [==============================] - 0s 249us/sample - loss: 846
60.4922
Epoch 1097/4000
6/6 [==============================] - 0s 203us/sample - loss: 840
41.9297
Epoch 1098/4000
6/6 [==============================] - 0s 13ms/sample - loss: 8342
9.1953
Epoch 1099/4000
6/6 [==============================] - 0s 302us/sample - loss: 828
22.3359
Epoch 1100/4000
6/6 [==============================] - 0s 223us/sample - loss: 822
21.2188
Epoch 1101/4000
6/6 [==============================] - 0s 234us/sample - loss: 816
21.3828
Epoch 1102/4000
6/6 [==============================] - 0s 218us/sample - loss: 810
26.4531
Epoch 1103/4000
6/6 [==============================] - 0s 220us/sample - loss: 804
34.5859
Epoch 1104/4000
6/6 [==============================] - 0s 270us/sample - loss: 798
49.0859
Epoch 1105/4000
6/6 [==============================] - 0s 257us/sample - loss: 792
69.3125
Epoch 1106/4000
6/6 [==============================] - 0s 203us/sample - loss: 786
90.9141
Epoch 1107/4000
6/6 [==============================] - 0s 14ms/sample - loss: 7811
7.2656
Epoch 1108/4000
6/6 [==============================] - 0s 252us/sample - loss: 775
51.3672
Epoch 1109/4000
6/6 [==============================] - 0s 235us/sample - loss: 769
83.7734
```

```
Epoch 1110/4000
6/6 [==============================] - 0s 263us/sample - loss: 764
23.6328
Epoch 1111/4000
6/6 [==============================] - 0s 261us/sample - loss: 758
65.1016
Epoch 1112/4000
6/6 [==============================] - 0s 294us/sample - loss: 753
13.6875
Epoch 1113/4000
6/6 [==============================] - 0s 253us/sample - loss: 747
67.0703
Epoch 1114/4000
6/6 [==============================] - 0s 246us/sample - loss: 742
17.2109
Epoch 1115/4000
6/6 [==============================] - 0s 285us/sample - loss: 736
79.8359
Epoch 1116/4000
6/6 [==============================] - 0s 230us/sample - loss: 731
43.0000
Epoch 1117/4000
6/6 [==============================] - 0s 14ms/sample - loss: 7260
8.9766
Epoch 1118/4000
6/6 [==============================] - 0s 264us/sample - loss: 720
81.6016
Epoch 1119/4000
6/6 [==============================] - 0s 259us/sample - loss: 715
54.3672
Epoch 1120/4000
6/6 [==============================] - 0s 284us/sample - loss: 710
35.7578
Epoch 1121/4000
6/6 [==============================] - 0s 264us/sample - loss: 705
17.3203
Epoch 1122/4000
6/6 [==============================] - 0s 208us/sample - loss: 700
01.3203
Epoch 1123/4000
6/6 [==============================] - 0s 211us/sample - loss: 694
91.2422
Epoch 1124/4000
6/6 [==============================] - 0s 252us/sample - loss: 689
83.8516
Epoch 1125/4000
6/6 [==============================] - 0s 267us/sample - loss: 684
82.3516
Epoch 1126/4000
6/6 [==============================] - 0s 14ms/sample - loss: 6798
5.8359
Epoch 1127/4000
6/6 [==============================] - 0s 240us/sample - loss: 674
88.1250
Epoch 1128/4000
6/6 [==============================] - 0s 229us/sample - loss: 669
96.4141
```

```
Epoch 1129/4000
6/6 [==============================] - 0s 240us/sample - loss: 665
10.9922
Epoch 1130/4000
6/6 [==============================] - 0s 212us/sample - loss: 660
27.0703
Epoch 1131/4000
6/6 [==============================] - 0s 203us/sample - loss: 655
45.8359
Epoch 1132/4000
6/6 [==============================] - 0s 240us/sample - loss: 650
66.1055
Epoch 1133/4000
6/6 [==============================] - 0s 228us/sample - loss: 645
92.5625
Epoch 1134/4000
6/6 [==============================] - 0s 236us/sample - loss: 641
24.8242
Epoch 1135/4000
6/6 [==============================] - 0s 194us/sample - loss: 636
55.8633
Epoch 1136/4000
6/6 [==============================] - 0s 14ms/sample - loss: 6319
1.6758
Epoch 1137/4000
6/6 [==============================] - 0s 266us/sample - loss: 627
33.0508
Epoch 1138/4000
6/6 [==============================] - 0s 232us/sample - loss: 622
75.2930
Epoch 1139/4000
6/6 [==============================] - 0s 210us/sample - loss: 618
23.9492
Epoch 1140/4000
6/6 [==============================] - 0s 221us/sample - loss: 613
70.3164
Epoch 1141/4000
6/6 [==============================] - 0s 250us/sample - loss: 609
22.5508
Epoch 1142/4000
6/6 [==============================] - 0s 218us/sample - loss: 604
78.3867
Epoch 1143/4000
6/6 [==============================] - 0s 206us/sample - loss: 600
38.0742
Epoch 1144/4000
6/6 [==============================] - 0s 195us/sample - loss: 596
02.8438
Epoch 1145/4000
6/6 [==============================] - 0s 226us/sample - loss: 591
68.0586
Epoch 1146/4000
6/6 [==============================] - 0s 14ms/sample - loss: 5873
4.8320
Epoch 1147/4000
6/6 [==============================] - 0s 254us/sample - loss: 583
09.0508
```

```
Epoch 1148/4000
6/6 [==============================] - 0s 222us/sample - loss: 578
84.0938
Epoch 1149/4000
6/6 [==============================] - 0s 214us/sample - loss: 574
62.6289
Epoch 1150/4000
6/6 [==============================] - 0s 207us/sample - loss: 570
43.2930
Epoch 1151/4000
6/6 [==============================] - 0s 212us/sample - loss: 566
28.2617
Epoch 1152/4000
6/6 [==============================] - 0s 214us/sample - loss: 562
15.8242
Epoch 1153/4000
6/6 [==============================] - 0s 222us/sample - loss: 558
04.8945
Epoch 1154/4000
6/6 [==============================] - 0s 216us/sample - loss: 554
00.1211
Epoch 1155/4000
6/6 [==============================] - 0s 237us/sample - loss: 549
96.6406
Epoch 1156/4000
6/6 [==============================] - 0s 309us/sample - loss: 545
95.2812
Epoch 1157/4000
6/6 [==============================] - 0s 272us/sample - loss: 541
95.3906
Epoch 1158/4000
6/6 [==============================] - 0s 286us/sample - loss: 538
01.2969
Epoch 1159/4000
6/6 [==============================] - 0s 197us/sample - loss: 534
09.9180
Epoch 1160/4000
6/6 [==============================] - 0s 239us/sample - loss: 530
23.0625
Epoch 1161/4000
6/6 [==============================] - 0s 288us/sample - loss: 526
35.4258
Epoch 1162/4000
6/6 [==============================] - 0s 199us/sample - loss: 522
50.4062
Epoch 1163/4000
6/6 [==============================] - 0s 222us/sample - loss: 518
71.2852
Epoch 1164/4000
6/6 [==============================] - 0s 213us/sample - loss: 514
93.8320
Epoch 1165/4000
6/6 [==============================] - 0s 14ms/sample - loss: 5111
8.0625
Epoch 1166/4000
6/6 [==============================] - 0s 254us/sample - loss: 507
44.3867
```

```
Epoch 1167/4000
6/6 [==============================] - 0s 253us/sample - loss: 503
74.5195
Epoch 1168/4000
6/6 [==============================] - 0s 222us/sample - loss: 500
08.4414
Epoch 1169/4000
6/6 [==============================] - 0s 230us/sample - loss: 496
42.2930
Epoch 1170/4000
6/6 [==============================] - 0s 240us/sample - loss: 492
82.1836
Epoch 1171/4000
6/6 [==============================] - 0s 209us/sample - loss: 489
22.7344
Epoch 1172/4000
6/6 [==============================] - 0s 239us/sample - loss: 485
67.0352
Epoch 1173/4000
6/6 [==============================] - 0s 234us/sample - loss: 482
11.6719
Epoch 1174/4000
6/6 [==============================] - 0s 238us/sample - loss: 478
61.2695
Epoch 1175/4000
6/6 [==============================] - 0s 184us/sample - loss: 475
12.8242
Epoch 1176/4000
6/6 [==============================] - 0s 305us/sample - loss: 471
66.4688
Epoch 1177/4000
6/6 [==============================] - 0s 248us/sample - loss: 468
23.7383
Epoch 1178/4000
6/6 [==============================] - 0s 261us/sample - loss: 464
82.6875
Epoch 1179/4000
6/6 [==============================] - 0s 244us/sample - loss: 461
43.4258
Epoch 1180/4000
6/6 [==============================] - 0s 234us/sample - loss: 458
06.8867
Epoch 1181/4000
6/6 [==============================] - 0s 267us/sample - loss: 454
74.3242
Epoch 1182/4000
6/6 [==============================] - 0s 206us/sample - loss: 451
42.7344
Epoch 1183/4000
6/6 [==============================] - 0s 228us/sample - loss: 448
11.3320
Epoch 1184/4000
6/6 [==============================] - 0s 236us/sample - loss: 444
87.9258
Epoch 1185/4000
6/6 [==============================] - 0s 205us/sample - loss: 441
62.7812
```

```
Epoch 1186/4000
6/6 [==============================] - 0s 239us/sample - loss: 438
40.8242
Epoch 1187/4000
6/6 [==============================] - 0s 228us/sample - loss: 435
22.2695
Epoch 1188/4000
6/6 [==============================] - 0s 203us/sample - loss: 432
03.9570
Epoch 1189/4000
6/6 [==============================] - 0s 216us/sample - loss: 428
90.6875
Epoch 1190/4000
6/6 [==============================] - 0s 192us/sample - loss: 425
79.3633
Epoch 1191/4000
6/6 [==============================] - 0s 196us/sample - loss: 422
68.3555
Epoch 1192/4000
6/6 [==============================] - 0s 202us/sample - loss: 419
59.2148
Epoch 1193/4000
6/6 [==============================] - 0s 200us/sample - loss: 416
53.9727
Epoch 1194/4000
6/6 [==============================] - 0s 189us/sample - loss: 413
49.8164
Epoch 1195/4000
6/6 [==============================] - 0s 190us/sample - loss: 410
48.3984
Epoch 1196/4000
6/6 [==============================] - 0s 263us/sample - loss: 407
48.8008
Epoch 1197/4000
6/6 [==============================] - 0s 313us/sample - loss: 404
54.2852
Epoch 1198/4000
6/6 [==============================] - 0s 219us/sample - loss: 401
58.6914
Epoch 1199/4000
6/6 [==============================] - 0s 259us/sample - loss: 398
65.5977
Epoch 1200/4000
6/6 [==============================] - 0s 192us/sample - loss: 395
74.7227
Epoch 1201/4000
6/6 [==============================] - 0s 262us/sample - loss: 392
85.3086
Epoch 1202/4000
6/6 [==============================] - 0s 210us/sample - loss: 390
00.0039
Epoch 1203/4000
6/6 [==============================] - 0s 254us/sample - loss: 387
14.5625
Epoch 1204/4000
6/6 [==============================] - 0s 235us/sample - loss: 384
33.9102
```

```
Epoch 1205/4000
6/6 [==============================] - 0s 14ms/sample - loss: 3815
3.9961
Epoch 1206/4000
6/6 [==============================] - 0s 272us/sample - loss: 378
77.3008
Epoch 1207/4000
6/6 [==============================] - 0s 235us/sample - loss: 375
99.6211
Epoch 1208/4000
6/6 [==============================] - 0s 282us/sample - loss: 373
24.1836
Epoch 1209/4000
6/6 [==============================] - 0s 236us/sample - loss: 370
54.1094
Epoch 1210/4000
6/6 [==============================] - 0s 249us/sample - loss: 367
84.4688
Epoch 1211/4000
6/6 [==============================] - 0s 237us/sample - loss: 365
17.6758
Epoch 1212/4000
6/6 [==============================] - 0s 217us/sample - loss: 362
51.4102
Epoch 1213/4000
6/6 [==============================] - 0s 199us/sample - loss: 359
88.2031
Epoch 1214/4000
6/6 [==============================] - 0s 242us/sample - loss: 357
26.0430
Epoch 1215/4000
6/6 [==============================] - 0s 14ms/sample - loss: 3546
3.6016
Epoch 1216/4000
6/6 [==============================] - 0s 239us/sample - loss: 352
06.8164
Epoch 1217/4000
6/6 [==============================] - 0s 227us/sample - loss: 349
50.1133
Epoch 1218/4000
6/6 [==============================] - 0s 212us/sample - loss: 346
94.2617
Epoch 1219/4000
6/6 [==============================] - 0s 247us/sample - loss: 344
42.3008
Epoch 1220/4000
6/6 [==============================] - 0s 225us/sample - loss: 341
90.2148
Epoch 1221/4000
6/6 [==============================] - 0s 217us/sample - loss: 339
42.5039
Epoch 1222/4000
6/6 [==============================] - 0s 228us/sample - loss: 336
95.7539
Epoch 1223/4000
6/6 [==============================] - 0s 223us/sample - loss: 334
48.3867
```

```
Epoch 1224/4000
6/6 [==============================] - 0s 197us/sample - loss: 332
04.8203
Epoch 1225/4000
6/6 [==============================] - 0s 240us/sample - loss: 329
64.2773
Epoch 1226/4000
6/6 [==============================] - 0s 13ms/sample - loss: 3272
1.7969
Epoch 1227/4000
6/6 [==============================] - 0s 274us/sample - loss: 324
84.8535
Epoch 1228/4000
6/6 [==============================] - 0s 259us/sample - loss: 322
47.6973
Epoch 1229/4000
6/6 [==============================] - 0s 263us/sample - loss: 320
13.1562
Epoch 1230/4000
6/6 [==============================] - 0s 228us/sample - loss: 317
81.3066
Epoch 1231/4000
6/6 [==============================] - 0s 199us/sample - loss: 315
48.6719
Epoch 1232/4000
6/6 [==============================] - 0s 202us/sample - loss: 313
18.7500
Epoch 1233/4000
6/6 [==============================] - 0s 201us/sample - loss: 310
89.0469
Epoch 1234/4000
6/6 [==============================] - 0s 194us/sample - loss: 308
64.2812
Epoch 1235/4000
6/6 [==============================] - 0s 314us/sample - loss: 306
40.6230
Epoch 1236/4000
6/6 [==============================] - 0s 226us/sample - loss: 304
16.7715
Epoch 1237/4000
6/6 [==============================] - 0s 223us/sample - loss: 301
93.3184
Epoch 1238/4000
6/6 [==============================] - 0s 302us/sample - loss: 299
74.0645
Epoch 1239/4000
6/6 [==============================] - 0s 195us/sample - loss: 297
55.4219
Epoch 1240/4000
6/6 [==============================] - 0s 279us/sample - loss: 295
39.2207
Epoch 1241/4000
6/6 [==============================] - 0s 204us/sample - loss: 293
23.7715
Epoch 1242/4000
6/6 [==============================] - 0s 252us/sample - loss: 291
12.0215
```

```
Epoch 1243/4000
6/6 [==============================] - 0s 196us/sample - loss: 288
99.9473
Epoch 1244/4000
6/6 [==============================] - 0s 226us/sample - loss: 286
88.6152
Epoch 1245/4000
6/6 [==============================] - 0s 13ms/sample - loss: 2847
7.8066
Epoch 1246/4000
6/6 [==============================] - 0s 281us/sample - loss: 282
72.2246
Epoch 1247/4000
6/6 [==============================] - 0s 266us/sample - loss: 280
67.1348
Epoch 1248/4000
6/6 [==============================] - 0s 267us/sample - loss: 278
62.7578
Epoch 1249/4000
6/6 [==============================] - 0s 246us/sample - loss: 276
58.0605
Epoch 1250/4000
6/6 [==============================] - 0s 220us/sample - loss: 274
57.4297
Epoch 1251/4000
6/6 [==============================] - 0s 227us/sample - loss: 272
56.9395
Epoch 1252/4000
6/6 [==============================] - 0s 193us/sample - loss: 270
57.8418
Epoch 1253/4000
6/6 [==============================] - 0s 276us/sample - loss: 268
61.2578
Epoch 1254/4000
6/6 [==============================] - 0s 201us/sample - loss: 266
65.7832
Epoch 1255/4000
6/6 [==============================] - 0s 300us/sample - loss: 264
71.3691
Epoch 1256/4000
6/6 [==============================] - 0s 294us/sample - loss: 262
78.7656
Epoch 1257/4000
6/6 [==============================] - 0s 209us/sample - loss: 260
88.1016
Epoch 1258/4000
6/6 [==============================] - 0s 216us/sample - loss: 258
98.0762
Epoch 1259/4000
6/6 [==============================] - 0s 203us/sample - loss: 257
07.9473
Epoch 1260/4000
6/6 [==============================] - 0s 263us/sample - loss: 255
21.7422
Epoch 1261/4000
6/6 [==============================] - 0s 255us/sample - loss: 253
36.3047
```

```
Epoch 1262/4000
6/6 [==============================] - 0s 208us/sample - loss: 251
51.4902
Epoch 1263/4000
6/6 [==============================] - 0s 209us/sample - loss: 249
67.6855
Epoch 1264/4000
6/6 [==============================] - 0s 200us/sample - loss: 247
85.1621
Epoch 1265/4000
6/6 [==============================] - 0s 204us/sample - loss: 246
04.9785
Epoch 1266/4000
6/6 [==============================] - 0s 281us/sample - loss: 244
26.8125
Epoch 1267/4000
6/6 [==============================] - 0s 248us/sample - loss: 242
48.6152
Epoch 1268/4000
6/6 [==============================] - 0s 233us/sample - loss: 240
70.9707
Epoch 1269/4000
6/6 [==============================] - 0s 232us/sample - loss: 238
94.4746
Epoch 1270/4000
6/6 [==============================] - 0s 216us/sample - loss: 237
20.9688
Epoch 1271/4000
6/6 [==============================] - 0s 200us/sample - loss: 235
48.5371
Epoch 1272/4000
6/6 [==============================] - 0s 207us/sample - loss: 233
76.8184
Epoch 1273/4000
6/6 [==============================] - 0s 245us/sample - loss: 232
06.9980
Epoch 1274/4000
6/6 [==============================] - 0s 206us/sample - loss: 230
38.8359
Epoch 1275/4000
6/6 [==============================] - 0s 214us/sample - loss: 228
69.2480
Epoch 1276/4000
6/6 [==============================] - 0s 197us/sample - loss: 227
04.0254
Epoch 1277/4000
6/6 [==============================] - 0s 333us/sample - loss: 225
38.2676
Epoch 1278/4000
6/6 [==============================] - 0s 265us/sample - loss: 223
73.0215
Epoch 1279/4000
6/6 [==============================] - 0s 218us/sample - loss: 222
11.0254
Epoch 1280/4000
6/6 [==============================] - 0s 266us/sample - loss: 220
49.8496
```

```
Epoch 1281/4000
6/6 [==============================] - 0s 195us/sample - loss: 218
87.3438
Epoch 1282/4000
6/6 [==============================] - 0s 203us/sample - loss: 217
29.7031
Epoch 1283/4000
6/6 [==============================] - 0s 208us/sample - loss: 215
72.0000
Epoch 1284/4000
6/6 [==============================] - 0s 197us/sample - loss: 214
14.5781
Epoch 1285/4000
6/6 [==============================] - 0s 251us/sample - loss: 212
57.1504
Epoch 1286/4000
6/6 [==============================] - 0s 191us/sample - loss: 211
02.7520
Epoch 1287/4000
6/6 [==============================] - 0s 280us/sample - loss: 209
50.0078
Epoch 1288/4000
6/6 [==============================] - 0s 229us/sample - loss: 207
96.5254
Epoch 1289/4000
6/6 [==============================] - 0s 211us/sample - loss: 206
44.8340
Epoch 1290/4000
6/6 [==============================] - 0s 239us/sample - loss: 204
95.3965
Epoch 1291/4000
6/6 [==============================] - 0s 208us/sample - loss: 203
45.3164
Epoch 1292/4000
6/6 [==============================] - 0s 207us/sample - loss: 201
96.0703
Epoch 1293/4000
6/6 [==============================] - 0s 262us/sample - loss: 200
49.5898
Epoch 1294/4000
6/6 [==============================] - 0s 229us/sample - loss: 199
03.9219
Epoch 1295/4000
6/6 [==============================] - 0s 238us/sample - loss: 197
59.6738
Epoch 1296/4000
6/6 [==============================] - 0s 226us/sample - loss: 196
13.9199
Epoch 1297/4000
6/6 [==============================] - 0s 285us/sample - loss: 194
72.4785
Epoch 1298/4000
6/6 [==============================] - 0s 242us/sample - loss: 193
29.8848
Epoch 1299/4000
6/6 [==============================] - 0s 211us/sample - loss: 191
89.8418
```

```
Epoch 1300/4000
6/6 [==============================] - 0s 217us/sample - loss: 190
50.0664
Epoch 1301/4000
6/6 [==============================] - 0s 243us/sample - loss: 189
10.5254
Epoch 1302/4000
6/6 [==============================] - 0s 195us/sample - loss: 187
73.8379
Epoch 1303/4000
6/6 [==============================] - 0s 213us/sample - loss: 186
35.4824
Epoch 1304/4000
6/6 [==============================] - 0s 228us/sample - loss: 185
00.6523
Epoch 1305/4000
6/6 [==============================] - 0s 213us/sample - loss: 183
65.3691
Epoch 1306/4000
6/6 [==============================] - 0s 233us/sample - loss: 182
30.4766
Epoch 1307/4000
6/6 [==============================] - 0s 289us/sample - loss: 180
98.2441
Epoch 1308/4000
6/6 [==============================] - 0s 245us/sample - loss: 179
66.7012
Epoch 1309/4000
6/6 [==============================] - 0s 210us/sample - loss: 178
36.7207
Epoch 1310/4000
6/6 [==============================] - 0s 206us/sample - loss: 177
06.2559
Epoch 1311/4000
6/6 [==============================] - 0s 226us/sample - loss: 175
76.9883
Epoch 1312/4000
6/6 [==============================] - 0s 189us/sample - loss: 174
49.7598
Epoch 1313/4000
6/6 [==============================] - 0s 221us/sample - loss: 173
21.7402
Epoch 1314/4000
6/6 [==============================] - 0s 241us/sample - loss: 171
96.5625
Epoch 1315/4000
6/6 [==============================] - 0s 213us/sample - loss: 170
72.0996
Epoch 1316/4000
6/6 [==============================] - 0s 222us/sample - loss: 169
46.3984
Epoch 1317/4000
6/6 [==============================] - 0s 207us/sample - loss: 168
24.0449
Epoch 1318/4000
6/6 [==============================] - 0s 264us/sample - loss: 167
02.5000
```

```
Epoch 1319/4000
6/6 [==============================] - 0s 265us/sample - loss: 165
79.6543
Epoch 1320/4000
6/6 [==============================] - 0s 200us/sample - loss: 164
59.2168
Epoch 1321/4000
6/6 [==============================] - 0s 202us/sample - loss: 163
37.8545
Epoch 1322/4000
6/6 [==============================] - 0s 249us/sample - loss: 162
20.0469
Epoch 1323/4000
6/6 [==============================] - 0s 192us/sample - loss: 161
01.9092
Epoch 1324/4000
6/6 [==============================] - 0s 196us/sample - loss: 159
84.2002
Epoch 1325/4000
6/6 [==============================] - 0s 195us/sample - loss: 158
69.6641
Epoch 1326/4000
6/6 [==============================] - 0s 233us/sample - loss: 157
52.9795
Epoch 1327/4000
6/6 [==============================] - 0s 14ms/sample - loss: 1563
7.9170
Epoch 1328/4000
6/6 [==============================] - 0s 276us/sample - loss: 155
25.0312
Epoch 1329/4000
6/6 [==============================] - 0s 299us/sample - loss: 154
11.9346
Epoch 1330/4000
6/6 [==============================] - 0s 294us/sample - loss: 153
00.0342
Epoch 1331/4000
6/6 [==============================] - 0s 205us/sample - loss: 151
88.9014
Epoch 1332/4000
6/6 [==============================] - 0s 229us/sample - loss: 150
78.3838
Epoch 1333/4000
6/6 [==============================] - 0s 201us/sample - loss: 149
67.4346
Epoch 1334/4000
6/6 [==============================] - 0s 201us/sample - loss: 148
58.2021
Epoch 1335/4000
6/6 [==============================] - 0s 207us/sample - loss: 147
49.4814
Epoch 1336/4000
6/6 [==============================] - 0s 194us/sample - loss: 146
43.1846
Epoch 1337/4000
6/6 [==============================] - 0s 285us/sample - loss: 145
35.0518
```

```
Epoch 1338/4000
6/6 [==============================] - 0s 282us/sample - loss: 144
29.6924
Epoch 1339/4000
6/6 [==============================] - 0s 220us/sample - loss: 143
24.2393
Epoch 1340/4000
6/6 [==============================] - 0s 235us/sample - loss: 142
19.1719
Epoch 1341/4000
6/6 [==============================] - 0s 231us/sample - loss: 141
16.5479
Epoch 1342/4000
6/6 [==============================] - 0s 214us/sample - loss: 140
13.5869
Epoch 1343/4000
6/6 [==============================] - 0s 220us/sample - loss: 139
11.6299
Epoch 1344/4000
6/6 [==============================] - 0s 209us/sample - loss: 138
10.3232
Epoch 1345/4000
6/6 [==============================] - 0s 239us/sample - loss: 137
10.5107
Epoch 1346/4000
6/6 [==============================] - 0s 186us/sample - loss: 136
10.4033
Epoch 1347/4000
6/6 [==============================] - 0s 13ms/sample - loss: 1351
1.8867
Epoch 1348/4000
6/6 [==============================] - 0s 350us/sample - loss: 134
13.0352
Epoch 1349/4000
6/6 [==============================] - 0s 217us/sample - loss: 133
15.3018
Epoch 1350/4000
6/6 [==============================] - 0s 282us/sample - loss: 132
17.9014
Epoch 1351/4000
6/6 [==============================] - 0s 250us/sample - loss: 131
21.2500
Epoch 1352/4000
6/6 [==============================] - 0s 217us/sample - loss: 130
24.8789
Epoch 1353/4000
6/6 [==============================] - 0s 264us/sample - loss: 129
30.9189
Epoch 1354/4000
6/6 [==============================] - 0s 205us/sample - loss: 128
36.8857
Epoch 1355/4000
6/6 [==============================] - 0s 253us/sample - loss: 127
43.8711
Epoch 1356/4000
6/6 [==============================] - 0s 250us/sample - loss: 126
51.1953
```

```
Epoch 1357/4000
6/6 [==============================] - 0s 14ms/sample - loss: 1255
8.8555
Epoch 1358/4000
6/6 [==============================] - 0s 261us/sample - loss: 124
66.8564
Epoch 1359/4000
6/6 [==============================] - 0s 229us/sample - loss: 123
75.6514
Epoch 1360/4000
6/6 [==============================] - 0s 266us/sample - loss: 122
85.1377
Epoch 1361/4000
6/6 [==============================] - 0s 266us/sample - loss: 121
95.9854
Epoch 1362/4000
6/6 [==============================] - 0s 236us/sample - loss: 121
07.0234
Epoch 1363/4000
6/6 [==============================] - 0s 250us/sample - loss: 120
18.4258
Epoch 1364/4000
6/6 [==============================] - 0s 201us/sample - loss: 119
32.1602
Epoch 1365/4000
6/6 [==============================] - 0s 233us/sample - loss: 118
44.4844
Epoch 1366/4000
6/6 [==============================] - 0s 245us/sample - loss: 117
58.3438
Epoch 1367/4000
6/6 [==============================] - 0s 211us/sample - loss: 116
72.8311
Epoch 1368/4000
6/6 [==============================] - 0s 13ms/sample - loss: 1158
6.7812
Epoch 1369/4000
6/6 [==============================] - 0s 317us/sample - loss: 115
03.5596
Epoch 1370/4000
6/6 [==============================] - 0s 259us/sample - loss: 114
19.5361
Epoch 1371/4000
6/6 [==============================] - 0s 253us/sample - loss: 113
36.1162
Epoch 1372/4000
6/6 [==============================] - 0s 215us/sample - loss: 112
54.0938
Epoch 1373/4000
6/6 [==============================] - 0s 234us/sample - loss: 111
71.1299
Epoch 1374/4000
6/6 [==============================] - 0s 244us/sample - loss: 110
90.0752
Epoch 1375/4000
6/6 [==============================] - 0s 248us/sample - loss: 110
09.1963
```

```
Epoch 1376/4000
6/6 [==============================] - 0s 239us/sample - loss: 109
29.5869
Epoch 1377/4000
6/6 [==============================] - 0s 246us/sample - loss: 108
49.6670
Epoch 1378/4000
6/6 [==============================] - 0s 213us/sample - loss: 107
69.8115
Epoch 1379/4000
6/6 [==============================] - 0s 13ms/sample - loss: 1069
1.0303
Epoch 1380/4000
6/6 [==============================] - 0s 265us/sample - loss: 106
14.6045
Epoch 1381/4000
6/6 [==============================] - 0s 219us/sample - loss: 105
37.0654
Epoch 1382/4000
6/6 [==============================] - 0s 242us/sample - loss: 104
59.4033
Epoch 1383/4000
6/6 [==============================] - 0s 236us/sample - loss: 103
83.0781
Epoch 1384/4000
6/6 [==============================] - 0s 204us/sample - loss: 103
09.1279
Epoch 1385/4000
6/6 [==============================] - 0s 229us/sample - loss: 102
33.6123
Epoch 1386/4000
6/6 [==============================] - 0s 211us/sample - loss: 101
58.9346
Epoch 1387/4000
6/6 [==============================] - 0s 233us/sample - loss: 100
84.3955
Epoch 1388/4000
6/6 [==============================] - 0s 221us/sample - loss: 100
10.9199
Epoch 1389/4000
6/6 [==============================] - 0s 14ms/sample - loss: 9938
.1875
Epoch 1390/4000
6/6 [==============================] - 0s 261us/sample - loss: 986
5.7119
Epoch 1391/4000
6/6 [==============================] - 0s 281us/sample - loss: 979
4.4199
Epoch 1392/4000
6/6 [==============================] - 0s 251us/sample - loss: 972
2.4590
Epoch 1393/4000
6/6 [==============================] - 0s 215us/sample - loss: 965
0.5674
Epoch 1394/4000
6/6 [==============================] - 0s 279us/sample - loss: 958
0.8213
```

```
Epoch 1395/4000
6/6 [==============================] - 0s 296us/sample - loss: 951
1.6963
Epoch 1396/4000
6/6 [==============================] - 0s 250us/sample - loss: 944
2.3447
Epoch 1397/4000
6/6 [==============================] - 0s 248us/sample - loss: 937
2.7646
Epoch 1398/4000
6/6 [==============================] - 0s 216us/sample - loss: 930
4.9521
Epoch 1399/4000
6/6 [==============================] - 0s 214us/sample - loss: 923
7.8438
Epoch 1400/4000
6/6 [==============================] - 0s 13ms/sample - loss: 9169
.4922
Epoch 1401/4000
6/6 [==============================] - 0s 302us/sample - loss: 910
3.2881
Epoch 1402/4000
6/6 [==============================] - 0s 236us/sample - loss: 903
6.9111
Epoch 1403/4000
6/6 [==============================] - 0s 275us/sample - loss: 897
0.8096
Epoch 1404/4000
6/6 [==============================] - 0s 243us/sample - loss: 890
6.2275
Epoch 1405/4000
6/6 [==============================] - 0s 199us/sample - loss: 884
1.4307
Epoch 1406/4000
6/6 [==============================] - 0s 268us/sample - loss: 877
6.8828
Epoch 1407/4000
6/6 [==============================] - 0s 282us/sample - loss: 871
2.9219
Epoch 1408/4000
6/6 [==============================] - 0s 222us/sample - loss: 864
9.7725
Epoch 1409/4000
6/6 [==============================] - 0s 14ms/sample - loss: 8585
.5469
Epoch 1410/4000
6/6 [==============================] - 0s 293us/sample - loss: 852
4.2139
Epoch 1411/4000
6/6 [==============================] - 0s 249us/sample - loss: 846
2.5498
Epoch 1412/4000
6/6 [==============================] - 0s 220us/sample - loss: 839
9.8193
Epoch 1413/4000
6/6 [==============================] - 0s 279us/sample - loss: 833
8.3350
```

```
Epoch 1414/4000
6/6 [==============================] - 0s 258us/sample - loss: 827
8.1846
Epoch 1415/4000
6/6 [==============================] - 0s 325us/sample - loss: 821
7.4189
Epoch 1416/4000
6/6 [==============================] - 0s 268us/sample - loss: 815
7.4360
Epoch 1417/4000
6/6 [==============================] - 0s 218us/sample - loss: 809
8.5742
Epoch 1418/4000
6/6 [==============================] - 0s 209us/sample - loss: 803
9.2188
Epoch 1419/4000
6/6 [==============================] - 0s 295us/sample - loss: 798
0.8750
Epoch 1420/4000
6/6 [==============================] - 0s 243us/sample - loss: 792
2.9902
Epoch 1421/4000
6/6 [==============================] - 0s 207us/sample - loss: 786
5.1978
Epoch 1422/4000
6/6 [==============================] - 0s 250us/sample - loss: 780
7.2632
Epoch 1423/4000
6/6 [==============================] - 0s 202us/sample - loss: 775
0.9214
Epoch 1424/4000
6/6 [==============================] - 0s 219us/sample - loss: 769
4.2773
Epoch 1425/4000
6/6 [==============================] - 0s 223us/sample - loss: 763
8.6743
Epoch 1426/4000
6/6 [==============================] - 0s 300us/sample - loss: 758
2.8765
Epoch 1427/4000
6/6 [==============================] - 0s 249us/sample - loss: 752
7.6782
Epoch 1428/4000
6/6 [==============================] - 0s 232us/sample - loss: 747
2.6816
Epoch 1429/4000
6/6 [==============================] - 0s 13ms/sample - loss: 7418
.8242
Epoch 1430/4000
6/6 [==============================] - 0s 266us/sample - loss: 736
4.6172
Epoch 1431/4000
6/6 [==============================] - 0s 224us/sample - loss: 731
1.0098
Epoch 1432/4000
6/6 [==============================] - 0s 265us/sample - loss: 725
7.9824
```

```
Epoch 1433/4000
6/6 [==============================] - 0s 233us/sample - loss: 720
4.6626
Epoch 1434/4000
6/6 [==============================] - 0s 210us/sample - loss: 715
1.9009
Epoch 1435/4000
6/6 [==============================] - 0s 246us/sample - loss: 709
9.4585
Epoch 1436/4000
6/6 [==============================] - 0s 207us/sample - loss: 704
9.0605
Epoch 1437/4000
6/6 [==============================] - 0s 277us/sample - loss: 699
7.1343
Epoch 1438/4000
6/6 [==============================] - 0s 210us/sample - loss: 694
6.1704
Epoch 1439/4000
6/6 [==============================] - 0s 14ms/sample - loss: 6895
.6831
Epoch 1440/4000
6/6 [==============================] - 0s 299us/sample - loss: 684
5.3267
Epoch 1441/4000
6/6 [==============================] - 0s 297us/sample - loss: 679
5.6934
Epoch 1442/4000
6/6 [==============================] - 0s 213us/sample - loss: 674
6.2700
Epoch 1443/4000
6/6 [==============================] - 0s 201us/sample - loss: 669
5.8745
Epoch 1444/4000
6/6 [==============================] - 0s 259us/sample - loss: 664
7.5117
Epoch 1445/4000
6/6 [==============================] - 0s 242us/sample - loss: 659
9.3774
Epoch 1446/4000
6/6 [==============================] - 0s 218us/sample - loss: 655
1.3926
Epoch 1447/4000
6/6 [==============================] - 0s 257us/sample - loss: 650
3.5562
Epoch 1448/4000
6/6 [==============================] - 0s 238us/sample - loss: 645
6.3398
Epoch 1449/4000
6/6 [==============================] - 0s 302us/sample - loss: 640
9.4028
Epoch 1450/4000
6/6 [==============================] - 0s 237us/sample - loss: 636
2.0879
Epoch 1451/4000
6/6 [==============================] - 0s 281us/sample - loss: 631
6.0957
```

```
Epoch 1452/4000
6/6 [==============================] - 0s 256us/sample - loss: 627
0.0156
Epoch 1453/4000
6/6 [==============================] - 0s 241us/sample - loss: 622
4.3462
Epoch 1454/4000
6/6 [==============================] - 0s 237us/sample - loss: 617
8.8555
Epoch 1455/4000
6/6 [==============================] - 0s 243us/sample - loss: 613
3.8262
Epoch 1456/4000
6/6 [==============================] - 0s 211us/sample - loss: 608
9.5503
Epoch 1457/4000
6/6 [==============================] - 0s 226us/sample - loss: 604
4.2109
Epoch 1458/4000
6/6 [==============================] - 0s 14ms/sample - loss: 6000
.9380
Epoch 1459/4000
6/6 [==============================] - 0s 320us/sample - loss: 595
7.1113
Epoch 1460/4000
6/6 [==============================] - 0s 268us/sample - loss: 591
3.5991
Epoch 1461/4000
6/6 [==============================] - 0s 223us/sample - loss: 587
0.5845
Epoch 1462/4000
6/6 [==============================] - 0s 214us/sample - loss: 582
7.7207
Epoch 1463/4000
6/6 [==============================] - 0s 236us/sample - loss: 578
4.8950
Epoch 1464/4000
6/6 [==============================] - 0s 221us/sample - loss: 574
3.3374
Epoch 1465/4000
6/6 [==============================] - 0s 217us/sample - loss: 570
1.5688
Epoch 1466/4000
6/6 [==============================] - 0s 202us/sample - loss: 565
9.3867
Epoch 1467/4000
6/6 [==============================] - 0s 14ms/sample - loss: 5618
.7148
Epoch 1468/4000
6/6 [==============================] - 0s 270us/sample - loss: 557
8.0410
Epoch 1469/4000
6/6 [==============================] - 0s 233us/sample - loss: 553
6.7056
Epoch 1470/4000
6/6 [==============================] - 0s 228us/sample - loss: 549
6.9888
```

```
Epoch 1471/4000
6/6 [==============================] - 0s 219us/sample - loss: 545
6.0957
Epoch 1472/4000
6/6 [==============================] - 0s 189us/sample - loss: 541
7.5757
Epoch 1473/4000
6/6 [==============================] - 0s 199us/sample - loss: 537
7.9966
Epoch 1474/4000
6/6 [==============================] - 0s 225us/sample - loss: 533
8.5376
Epoch 1475/4000
6/6 [==============================] - 0s 196us/sample - loss: 529
9.9180
Epoch 1476/4000
6/6 [==============================] - 0s 222us/sample - loss: 526
0.7471
Epoch 1477/4000
6/6 [==============================] - 0s 186us/sample - loss: 522
2.5635
Epoch 1478/4000
6/6 [==============================] - 0s 261us/sample - loss: 518
4.6626
Epoch 1479/4000
6/6 [==============================] - 0s 234us/sample - loss: 514
7.3384
Epoch 1480/4000
6/6 [==============================] - 0s 223us/sample - loss: 510
9.0615
Epoch 1481/4000
6/6 [==============================] - 0s 274us/sample - loss: 507
1.9800
Epoch 1482/4000
6/6 [==============================] - 0s 234us/sample - loss: 503
5.1650
Epoch 1483/4000
6/6 [==============================] - 0s 265us/sample - loss: 499
8.6108
Epoch 1484/4000
6/6 [==============================] - 0s 216us/sample - loss: 496
2.3301
Epoch 1485/4000
6/6 [==============================] - 0s 237us/sample - loss: 492
5.8550
Epoch 1486/4000
6/6 [==============================] - 0s 14ms/sample - loss: 4890
.1577
Epoch 1487/4000
6/6 [==============================] - 0s 299us/sample - loss: 485
4.8921
Epoch 1488/4000
6/6 [==============================] - 0s 309us/sample - loss: 481
8.3999
Epoch 1489/4000
6/6 [==============================] - 0s 263us/sample - loss: 478
4.1465
```

```
Epoch 1490/4000
6/6 [==============================] - 0s 192us/sample - loss: 474
9.2812
Epoch 1491/4000
6/6 [==============================] - 0s 216us/sample - loss: 471
4.5518
Epoch 1492/4000
6/6 [==============================] - 0s 192us/sample - loss: 468
0.1841
Epoch 1493/4000
6/6 [==============================] - 0s 213us/sample - loss: 464
5.9429
Epoch 1494/4000
6/6 [==============================] - 0s 248us/sample - loss: 461
2.3765
Epoch 1495/4000
6/6 [==============================] - 0s 185us/sample - loss: 457
8.4604
Epoch 1496/4000
6/6 [==============================] - 0s 217us/sample - loss: 454
4.9761
Epoch 1497/4000
6/6 [==============================] - 0s 280us/sample - loss: 451
2.3652
Epoch 1498/4000
6/6 [==============================] - 0s 272us/sample - loss: 447
9.1235
Epoch 1499/4000
6/6 [==============================] - 0s 240us/sample - loss: 444
6.7515
Epoch 1500/4000
6/6 [==============================] - 0s 271us/sample - loss: 441
3.6343
Epoch 1501/4000
6/6 [==============================] - 0s 251us/sample - loss: 438
2.1104
Epoch 1502/4000
6/6 [==============================] - 0s 246us/sample - loss: 435
0.2817
Epoch 1503/4000
6/6 [==============================] - 0s 203us/sample - loss: 431
7.9434
Epoch 1504/4000
6/6 [==============================] - 0s 205us/sample - loss: 428
6.9224
Epoch 1505/4000
6/6 [==============================] - 0s 14ms/sample - loss: 4256
.0581
Epoch 1506/4000
6/6 [==============================] - 0s 269us/sample - loss: 422
5.0298
Epoch 1507/4000
6/6 [==============================] - 0s 231us/sample - loss: 419
4.0225
Epoch 1508/4000
6/6 [==============================] - 0s 253us/sample - loss: 416
3.3579
```

```
Epoch 1509/4000
6/6 [==============================] - 0s 203us/sample - loss: 413
3.5840
Epoch 1510/4000
6/6 [==============================] - 0s 190us/sample - loss: 410
3.1421
Epoch 1511/4000
6/6 [==============================] - 0s 192us/sample - loss: 407
3.3298
Epoch 1512/4000
6/6 [==============================] - 0s 218us/sample - loss: 404
3.6262
Epoch 1513/4000
6/6 [==============================] - 0s 211us/sample - loss: 401
4.5449
Epoch 1514/4000
6/6 [==============================] - 0s 234us/sample - loss: 398
5.3855
Epoch 1515/4000
6/6 [==============================] - 0s 242us/sample - loss: 395
6.2063
Epoch 1516/4000
6/6 [==============================] - 0s 303us/sample - loss: 392
7.5312
Epoch 1517/4000
6/6 [==============================] - 0s 294us/sample - loss: 389
8.9333
Epoch 1518/4000
6/6 [==============================] - 0s 224us/sample - loss: 387
0.4668
Epoch 1519/4000
6/6 [==============================] - 0s 240us/sample - loss: 384
2.0781
Epoch 1520/4000
6/6 [==============================] - 0s 200us/sample - loss: 381
4.4304
Epoch 1521/4000
6/6 [==============================] - 0s 223us/sample - loss: 378
6.3572
Epoch 1522/4000
6/6 [==============================] - 0s 191us/sample - loss: 375
9.0811
Epoch 1523/4000
6/6 [==============================] - 0s 196us/sample - loss: 373
1.1257
Epoch 1524/4000
6/6 [==============================] - 0s 255us/sample - loss: 370
4.2185
Epoch 1525/4000
6/6 [==============================] - 0s 201us/sample - loss: 367
6.7620
Epoch 1526/4000
6/6 [==============================] - 0s 14ms/sample - loss: 3650
.7822
Epoch 1527/4000
6/6 [==============================] - 0s 252us/sample - loss: 362
3.7864
```

```
Epoch 1528/4000
6/6 [==============================] - 0s 211us/sample - loss: 359
7.1631
Epoch 1529/4000
6/6 [==============================] - 0s 241us/sample - loss: 357
1.3945
Epoch 1530/4000
6/6 [==============================] - 0s 207us/sample - loss: 354
5.5139
Epoch 1531/4000
6/6 [==============================] - 0s 211us/sample - loss: 351
8.6360
Epoch 1532/4000
6/6 [==============================] - 0s 219us/sample - loss: 349
3.3191
Epoch 1533/4000
6/6 [==============================] - 0s 221us/sample - loss: 346
8.2649
Epoch 1534/4000
6/6 [==============================] - 0s 278us/sample - loss: 344
3.0671
Epoch 1535/4000
6/6 [==============================] - 0s 235us/sample - loss: 341
7.7532
Epoch 1536/4000
6/6 [==============================] - 0s 238us/sample - loss: 339
3.1338
Epoch 1537/4000
6/6 [==============================] - 0s 13ms/sample - loss: 3368
.4949
Epoch 1538/4000
6/6 [==============================] - 0s 274us/sample - loss: 334
3.9512
Epoch 1539/4000
6/6 [==============================] - 0s 231us/sample - loss: 331
9.2295
Epoch 1540/4000
6/6 [==============================] - 0s 239us/sample - loss: 329
5.4456
Epoch 1541/4000
6/6 [==============================] - 0s 246us/sample - loss: 327
1.1648
Epoch 1542/4000
6/6 [==============================] - 0s 234us/sample - loss: 324
7.3391
Epoch 1543/4000
6/6 [==============================] - 0s 245us/sample - loss: 322
4.0605
Epoch 1544/4000
6/6 [==============================] - 0s 254us/sample - loss: 320
0.3828
Epoch 1545/4000
6/6 [==============================] - 0s 212us/sample - loss: 317
7.0735
Epoch 1546/4000
6/6 [==============================] - 0s 14ms/sample - loss: 3154
.0242
```

```
Epoch 1547/4000
6/6 [==============================] - 0s 269us/sample - loss: 313
0.8848
Epoch 1548/4000
6/6 [==============================] - 0s 233us/sample - loss: 310
8.2576
Epoch 1549/4000
6/6 [==============================] - 0s 235us/sample - loss: 308
5.2625
Epoch 1550/4000
6/6 [==============================] - 0s 234us/sample - loss: 306
2.8252
Epoch 1551/4000
6/6 [==============================] - 0s 209us/sample - loss: 304
0.3123
Epoch 1552/4000
6/6 [==============================] - 0s 245us/sample - loss: 301
8.5627
Epoch 1553/4000
6/6 [==============================] - 0s 240us/sample - loss: 299
6.6738
Epoch 1554/4000
6/6 [==============================] - 0s 204us/sample - loss: 297
4.3440
Epoch 1555/4000
6/6 [==============================] - 0s 203us/sample - loss: 295
2.8328
Epoch 1556/4000
6/6 [==============================] - 0s 272us/sample - loss: 293
1.2561
Epoch 1557/4000
6/6 [==============================] - 0s 318us/sample - loss: 291
0.4883
Epoch 1558/4000
6/6 [==============================] - 0s 201us/sample - loss: 288
8.8528
Epoch 1559/4000
6/6 [==============================] - 0s 219us/sample - loss: 286
7.5117
Epoch 1560/4000
6/6 [==============================] - 0s 216us/sample - loss: 284
7.2324
Epoch 1561/4000
6/6 [==============================] - 0s 199us/sample - loss: 282
6.2161
Epoch 1562/4000
6/6 [==============================] - 0s 221us/sample - loss: 280
6.0654
Epoch 1563/4000
6/6 [==============================] - 0s 220us/sample - loss: 278
5.2617
Epoch 1564/4000
6/6 [==============================] - 0s 210us/sample - loss: 276
5.1824
Epoch 1565/4000
6/6 [==============================] - 0s 200us/sample - loss: 274
4.6990
```

```
Epoch 1566/4000
6/6 [==============================] - 0s 261us/sample - loss: 272
5.0789
Epoch 1567/4000
6/6 [==============================] - 0s 230us/sample - loss: 270
5.0852
Epoch 1568/4000
6/6 [==============================] - 0s 241us/sample - loss: 268
5.0618
Epoch 1569/4000
6/6 [==============================] - 0s 187us/sample - loss: 266
5.8977
Epoch 1570/4000
6/6 [==============================] - 0s 205us/sample - loss: 264
5.8665
Epoch 1571/4000
6/6 [==============================] - 0s 185us/sample - loss: 262
6.7854
Epoch 1572/4000
6/6 [==============================] - 0s 188us/sample - loss: 260
7.9331
Epoch 1573/4000
6/6 [==============================] - 0s 184us/sample - loss: 258
8.2839
Epoch 1574/4000
6/6 [==============================] - 0s 190us/sample - loss: 256
9.9636
Epoch 1575/4000
6/6 [==============================] - 0s 195us/sample - loss: 255
0.9075
Epoch 1576/4000
6/6 [==============================] - 0s 185us/sample - loss: 253
2.7922
Epoch 1577/4000
6/6 [==============================] - 0s 14ms/sample - loss: 2514
.2307
Epoch 1578/4000
6/6 [==============================] - 0s 257us/sample - loss: 249
6.0364
Epoch 1579/4000
6/6 [==============================] - 0s 266us/sample - loss: 247
7.8972
Epoch 1580/4000
6/6 [==============================] - 0s 194us/sample - loss: 245
9.7141
Epoch 1581/4000
6/6 [==============================] - 0s 280us/sample - loss: 244
1.1873
Epoch 1582/4000
6/6 [==============================] - 0s 213us/sample - loss: 242
4.1448
Epoch 1583/4000
6/6 [==============================] - 0s 195us/sample - loss: 240
6.3289
Epoch 1584/4000
6/6 [==============================] - 0s 228us/sample - loss: 238
8.8877
```

```
Epoch 1585/4000
6/6 [==============================] - 0s 224us/sample - loss: 237
1.5100
Epoch 1586/4000
6/6 [==============================] - 0s 227us/sample - loss: 235
4.1960
Epoch 1587/4000
6/6 [==============================] - 0s 201us/sample - loss: 233
6.7900
Epoch 1588/4000
6/6 [==============================] - 0s 14ms/sample - loss: 2319
.8225
Epoch 1589/4000
6/6 [==============================] - 0s 261us/sample - loss: 230
3.1245
Epoch 1590/4000
6/6 [==============================] - 0s 263us/sample - loss: 228
6.3916
Epoch 1591/4000
6/6 [==============================] - 0s 194us/sample - loss: 226
9.8145
Epoch 1592/4000
6/6 [==============================] - 0s 206us/sample - loss: 225
3.1560
Epoch 1593/4000
6/6 [==============================] - 0s 231us/sample - loss: 223
6.8108
Epoch 1594/4000
6/6 [==============================] - 0s 199us/sample - loss: 222
0.3984
Epoch 1595/4000
6/6 [==============================] - 0s 262us/sample - loss: 220
4.3865
Epoch 1596/4000
6/6 [==============================] - 0s 240us/sample - loss: 218
8.1201
Epoch 1597/4000
6/6 [==============================] - 0s 229us/sample - loss: 217
2.4414
Epoch 1598/4000
6/6 [==============================] - 0s 259us/sample - loss: 215
6.3096
Epoch 1599/4000
6/6 [==============================] - 0s 293us/sample - loss: 214
0.8279
Epoch 1600/4000
6/6 [==============================] - 0s 216us/sample - loss: 212
5.6270
Epoch 1601/4000
6/6 [==============================] - 0s 202us/sample - loss: 210
9.5789
Epoch 1602/4000
6/6 [==============================] - 0s 194us/sample - loss: 209
4.2458
Epoch 1603/4000
6/6 [==============================] - 0s 211us/sample - loss: 207
9.7273
```

```
Epoch 1604/4000
6/6 [==============================] - 0s 212us/sample - loss: 206
4.2319
Epoch 1605/4000
6/6 [==============================] - 0s 240us/sample - loss: 204
9.1904
Epoch 1606/4000
6/6 [==============================] - 0s 200us/sample - loss: 203
4.2100
Epoch 1607/4000
6/6 [==============================] - 0s 14ms/sample - loss: 2019
.5023
Epoch 1608/4000
6/6 [==============================] - 0s 303us/sample - loss: 200
4.5804
Epoch 1609/4000
6/6 [==============================] - 0s 243us/sample - loss: 199
0.1740
Epoch 1610/4000
6/6 [==============================] - 0s 233us/sample - loss: 197
5.7404
Epoch 1611/4000
6/6 [==============================] - 0s 209us/sample - loss: 196
1.2714
Epoch 1612/4000
6/6 [==============================] - 0s 203us/sample - loss: 194
6.8016
Epoch 1613/4000
6/6 [==============================] - 0s 242us/sample - loss: 193
2.9073
Epoch 1614/4000
6/6 [==============================] - 0s 190us/sample - loss: 191
8.7177
Epoch 1615/4000
6/6 [==============================] - 0s 217us/sample - loss: 190
4.4741
Epoch 1616/4000
6/6 [==============================] - 0s 243us/sample - loss: 189
0.3705
Epoch 1617/4000
6/6 [==============================] - 0s 14ms/sample - loss: 1877
.2505
Epoch 1618/4000
6/6 [==============================] - 0s 332us/sample - loss: 186
3.5023
Epoch 1619/4000
6/6 [==============================] - 0s 280us/sample - loss: 184
9.7750
Epoch 1620/4000
6/6 [==============================] - 0s 221us/sample - loss: 183
6.1895
Epoch 1621/4000
6/6 [==============================] - 0s 239us/sample - loss: 182
2.6207
Epoch 1622/4000
6/6 [==============================] - 0s 206us/sample - loss: 180
9.5079
```

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Epoch 1623/4000
6/6 [==============================] - 0s 203us/sample - loss: 179
6.2074
Epoch 1624/4000
6/6 [==============================] - 0s 201us/sample - loss: 178
3.5508
Epoch 1625/4000
6/6 [==============================] - 0s 224us/sample - loss: 177
0.1782
Epoch 1626/4000
6/6 [==============================] - 0s 187us/sample - loss: 175
7.0375
Epoch 1627/4000
6/6 [==============================] - 0s 14ms/sample - loss: 1744
.4000
Epoch 1628/4000
6/6 [==============================] - 0s 394us/sample - loss: 173
1.6136
Epoch 1629/4000
6/6 [==============================] - 0s 261us/sample - loss: 171
8.8060
Epoch 1630/4000
6/6 [==============================] - 0s 277us/sample - loss: 170
6.4951
Epoch 1631/4000
6/6 [==============================] - 0s 254us/sample - loss: 169
3.9948
Epoch 1632/4000
6/6 [==============================] - 0s 266us/sample - loss: 168
1.7041
Epoch 1633/4000
6/6 [==============================] - 0s 201us/sample - loss: 166
9.5269
Epoch 1634/4000
6/6 [==============================] - 0s 207us/sample - loss: 165
7.3394
Epoch 1635/4000
6/6 [==============================] - 0s 215us/sample - loss: 164
5.4481
Epoch 1636/4000
6/6 [==============================] - 0s 14ms/sample - loss: 1633
.5328
Epoch 1637/4000
6/6 [==============================] - 0s 354us/sample - loss: 162
1.5179
Epoch 1638/4000
6/6 [==============================] - 0s 231us/sample - loss: 160
9.4497
Epoch 1639/4000
6/6 [==============================] - 0s 248us/sample - loss: 159
8.1666
Epoch 1640/4000
6/6 [==============================] - 0s 211us/sample - loss: 158
6.0580
Epoch 1641/4000
6/6 [==============================] - 0s 191us/sample - loss: 157
4.8485
```

```
Epoch 1642/4000
6/6 [==============================] - 0s 209us/sample - loss: 156
3.5433
Epoch 1643/4000
6/6 [==============================] - 0s 190us/sample - loss: 155
2.0604
Epoch 1644/4000
6/6 [==============================] - 0s 196us/sample - loss: 154
0.8375
Epoch 1645/4000
6/6 [==============================] - 0s 212us/sample - loss: 152
9.3164
Epoch 1646/4000
6/6 [==============================] - 0s 14ms/sample - loss: 1518
.6119
Epoch 1647/4000
6/6 [==============================] - 0s 351us/sample - loss: 150
7.0634
Epoch 1648/4000
6/6 [==============================] - 0s 239us/sample - loss: 149
6.0684
Epoch 1649/4000
6/6 [==============================] - 0s 246us/sample - loss: 148
5.0719
Epoch 1650/4000
6/6 [==============================] - 0s 206us/sample - loss: 147
4.7284
Epoch 1651/4000
6/6 [==============================] - 0s 237us/sample - loss: 146
3.8356
Epoch 1652/4000
6/6 [==============================] - 0s 204us/sample - loss: 145
3.1864
Epoch 1653/4000
6/6 [==============================] - 0s 254us/sample - loss: 144
2.5760
Epoch 1654/4000
6/6 [==============================] - 0s 230us/sample - loss: 143
2.0045
Epoch 1655/4000
6/6 [==============================] - 0s 226us/sample - loss: 142
1.4718
Epoch 1656/4000
6/6 [==============================] - 0s 14ms/sample - loss: 1411
.1490
Epoch 1657/4000
6/6 [==============================] - 0s 311us/sample - loss: 140
1.0635
Epoch 1658/4000
6/6 [==============================] - 0s 249us/sample - loss: 139
0.6324
Epoch 1659/4000
6/6 [==============================] - 0s 234us/sample - loss: 138
0.6576
Epoch 1660/4000
6/6 [==============================] - 0s 228us/sample - loss: 137
0.6031
```

```
Epoch 1661/4000
6/6 [==============================] - 0s 236us/sample - loss: 136
0.8602
Epoch 1662/4000
6/6 [==============================] - 0s 194us/sample - loss: 135
0.7843
Epoch 1663/4000
6/6 [==============================] - 0s 200us/sample - loss: 134
0.8395
Epoch 1664/4000
6/6 [==============================] - 0s 234us/sample - loss: 133
0.9724
Epoch 1665/4000
6/6 [==============================] - 0s 201us/sample - loss: 132
1.4315
Epoch 1666/4000
6/6 [==============================] - 0s 381us/sample - loss: 131
1.9613
Epoch 1667/4000
6/6 [==============================] - 0s 282us/sample - loss: 130
2.4012
Epoch 1668/4000
6/6 [==============================] - 0s 205us/sample - loss: 129
2.6766
Epoch 1669/4000
6/6 [==============================] - 0s 261us/sample - loss: 128
3.3102
Epoch 1670/4000
6/6 [==============================] - 0s 213us/sample - loss: 127
3.9186
Epoch 1671/4000
6/6 [==============================] - 0s 241us/sample - loss: 126
4.6481
Epoch 1672/4000
6/6 [==============================] - 0s 247us/sample - loss: 125
5.2394
Epoch 1673/4000
6/6 [==============================] - 0s 257us/sample - loss: 124
6.5850
Epoch 1674/4000
6/6 [==============================] - 0s 251us/sample - loss: 123
7.0912
Epoch 1675/4000
6/6 [==============================] - 0s 14ms/sample - loss: 1228
.2247
Epoch 1676/4000
6/6 [==============================] - 0s 344us/sample - loss: 121
9.2343
Epoch 1677/4000
6/6 [==============================] - 0s 262us/sample - loss: 121
0.3749
Epoch 1678/4000
6/6 [==============================] - 0s 267us/sample - loss: 120
1.5309
Epoch 1679/4000
6/6 [==============================] - 0s 203us/sample - loss: 119
3.0414
```

```
Epoch 1680/4000
6/6 [==============================] - 0s 223us/sample - loss: 118
4.2539
Epoch 1681/4000
6/6 [==============================] - 0s 235us/sample - loss: 117
5.6625
Epoch 1682/4000
6/6 [==============================] - 0s 229us/sample - loss: 116
7.1405
Epoch 1683/4000
6/6 [==============================] - 0s 232us/sample - loss: 115
8.5699
Epoch 1684/4000
6/6 [==============================] - 0s 240us/sample - loss: 115
0.0311
Epoch 1685/4000
6/6 [==============================] - 0s 13ms/sample - loss: 1141
.6029
Epoch 1686/4000
6/6 [==============================] - 0s 348us/sample - loss: 113
3.3470
Epoch 1687/4000
6/6 [==============================] - 0s 242us/sample - loss: 112
5.2667
Epoch 1688/4000
6/6 [==============================] - 0s 212us/sample - loss: 111
6.7184
Epoch 1689/4000
6/6 [==============================] - 0s 227us/sample - loss: 110
8.8707
Epoch 1690/4000
6/6 [==============================] - 0s 232us/sample - loss: 110
0.9443
Epoch 1691/4000
6/6 [==============================] - 0s 237us/sample - loss: 109
2.7828
Epoch 1692/4000
6/6 [==============================] - 0s 209us/sample - loss: 108
4.7058
Epoch 1693/4000
6/6 [==============================] - 0s 214us/sample - loss: 107
6.9061
Epoch 1694/4000
6/6 [==============================] - 0s 209us/sample - loss: 106
9.0696
Epoch 1695/4000
6/6 [==============================] - 0s 14ms/sample - loss: 1061
.3265
Epoch 1696/4000
6/6 [==============================] - 0s 350us/sample - loss: 105
3.3669
Epoch 1697/4000
6/6 [==============================] - 0s 244us/sample - loss: 104
5.9039
Epoch 1698/4000
6/6 [==============================] - 0s 262us/sample - loss: 103
8.0846
```

```
Epoch 1699/4000
6/6 [==============================] - 0s 230us/sample - loss: 103
0.6581
Epoch 1700/4000
6/6 [==============================] - 0s 215us/sample - loss: 102
3.2761
Epoch 1701/4000
6/6 [==============================] - 0s 226us/sample - loss: 101
5.7437
Epoch 1702/4000
6/6 [==============================] - 0s 205us/sample - loss: 100
8.4153
Epoch 1703/4000
6/6 [==============================] - 0s 218us/sample - loss: 100
0.9378
Epoch 1704/4000
6/6 [==============================] - 0s 14ms/sample - loss: 993.
8066
Epoch 1705/4000
6/6 [==============================] - 0s 280us/sample - loss: 986
.4573
Epoch 1706/4000
6/6 [==============================] - 0s 213us/sample - loss: 979
.0618
Epoch 1707/4000
6/6 [==============================] - 0s 216us/sample - loss: 972
.2890
Epoch 1708/4000
6/6 [==============================] - 0s 227us/sample - loss: 965
.1058
Epoch 1709/4000
6/6 [==============================] - 0s 249us/sample - loss: 957
.9011
Epoch 1710/4000
6/6 [==============================] - 0s 247us/sample - loss: 950
.7741
Epoch 1711/4000
6/6 [==============================] - 0s 204us/sample - loss: 944
.2399
Epoch 1712/4000
6/6 [==============================] - 0s 247us/sample - loss: 937
.2394
Epoch 1713/4000
6/6 [==============================] - 0s 217us/sample - loss: 930
.3935
Epoch 1714/4000
6/6 [==============================] - 0s 13ms/sample - loss: 923.
3803
Epoch 1715/4000
6/6 [==============================] - 0s 361us/sample - loss: 916
.9814
Epoch 1716/4000
6/6 [==============================] - 0s 323us/sample - loss: 910
.2767
Epoch 1717/4000
6/6 [==============================] - 0s 243us/sample - loss: 903
.6669
```

```
Epoch 1718/4000
6/6 [==============================] - 0s 223us/sample - loss: 896
.9681
Epoch 1719/4000
6/6 [==============================] - 0s 275us/sample - loss: 890
.6617
Epoch 1720/4000
6/6 [==============================] - 0s 223us/sample - loss: 883
.9355
Epoch 1721/4000
6/6 [==============================] - 0s 287us/sample - loss: 877
.4979
Epoch 1722/4000
6/6 [==============================] - 0s 235us/sample - loss: 871
.1426
Epoch 1723/4000
6/6 [==============================] - 0s 208us/sample - loss: 864
.7417
Epoch 1724/4000
6/6 [==============================] - 0s 224us/sample - loss: 858
.5601
Epoch 1725/4000
6/6 [==============================] - 0s 13ms/sample - loss: 852.
0892
Epoch 1726/4000
6/6 [==============================] - 0s 344us/sample - loss: 846
.0359
Epoch 1727/4000
6/6 [==============================] - 0s 286us/sample - loss: 839
.8889
Epoch 1728/4000
6/6 [==============================] - 0s 253us/sample - loss: 834
.0432
Epoch 1729/4000
6/6 [==============================] - 0s 222us/sample - loss: 827
.6655
Epoch 1730/4000
6/6 [==============================] - 0s 220us/sample - loss: 821
.5857
Epoch 1731/4000
6/6 [==============================] - 0s 234us/sample - loss: 815
.5096
Epoch 1732/4000
6/6 [==============================] - 0s 207us/sample - loss: 809
.8976
Epoch 1733/4000
6/6 [==============================] - 0s 204us/sample - loss: 804
.0537
Epoch 1734/4000
6/6 [==============================] - 0s 14ms/sample - loss: 798.
0115
Epoch 1735/4000
6/6 [==============================] - 0s 356us/sample - loss: 792
.2541
Epoch 1736/4000
6/6 [==============================] - 0s 262us/sample - loss: 786
.3934
```

```
Epoch 1737/4000
6/6 [==============================] - 0s 269us/sample - loss: 780
.7651
Epoch 1738/4000
6/6 [==============================] - 0s 215us/sample - loss: 774
.9688
Epoch 1739/4000
6/6 [==============================] - 0s 248us/sample - loss: 769
.3600
Epoch 1740/4000
6/6 [==============================] - 0s 214us/sample - loss: 763
.8088
Epoch 1741/4000
6/6 [==============================] - 0s 248us/sample - loss: 758
.1153
Epoch 1742/4000
6/6 [==============================] - 0s 203us/sample - loss: 752
.7844
Epoch 1743/4000
6/6 [==============================] - 0s 231us/sample - loss: 747
.2353
Epoch 1744/4000
6/6 [==============================] - 0s 383us/sample - loss: 741
.9099
Epoch 1745/4000
6/6 [==============================] - 0s 245us/sample - loss: 736
.2775
Epoch 1746/4000
6/6 [==============================] - 0s 231us/sample - loss: 731
.1494
Epoch 1747/4000
6/6 [==============================] - 0s 234us/sample - loss: 725
.5942
Epoch 1748/4000
6/6 [==============================] - 0s 214us/sample - loss: 720
.2628
Epoch 1749/4000
6/6 [==============================] - 0s 235us/sample - loss: 715
.1201
Epoch 1750/4000
6/6 [==============================] - 0s 208us/sample - loss: 709
.8715
Epoch 1751/4000
6/6 [==============================] - 0s 202us/sample - loss: 704
.6428
Epoch 1752/4000
6/6 [==============================] - 0s 14ms/sample - loss: 699.
3890
Epoch 1753/4000
6/6 [==============================] - 0s 364us/sample - loss: 694
.4323
Epoch 1754/4000
6/6 [==============================] - 0s 313us/sample - loss: 689
.6334
Epoch 1755/4000
6/6 [==============================] - 0s 262us/sample - loss: 684
.3519
```

```
Epoch 1756/4000
6/6 [==============================] - 0s 245us/sample - loss: 679
.4490
Epoch 1757/4000
6/6 [==============================] - 0s 245us/sample - loss: 674
.4690
Epoch 1758/4000
6/6 [==============================] - 0s 231us/sample - loss: 669
.7226
Epoch 1759/4000
6/6 [==============================] - 0s 230us/sample - loss: 664
.7182
Epoch 1760/4000
6/6 [==============================] - 0s 242us/sample - loss: 659
.8951
Epoch 1761/4000
6/6 [==============================] - 0s 193us/sample - loss: 655
.1406
Epoch 1762/4000
6/6 [==============================] - 0s 14ms/sample - loss: 650.
2816
Epoch 1763/4000
6/6 [==============================] - 0s 310us/sample - loss: 645
.6918
Epoch 1764/4000
6/6 [==============================] - 0s 290us/sample - loss: 640
.8124
Epoch 1765/4000
6/6 [==============================] - 0s 248us/sample - loss: 636
.1576
Epoch 1766/4000
6/6 [==============================] - 0s 250us/sample - loss: 631
.7205
Epoch 1767/4000
6/6 [==============================] - 0s 218us/sample - loss: 626
.9026
Epoch 1768/4000
6/6 [==============================] - 0s 282us/sample - loss: 622
.6697
Epoch 1769/4000
6/6 [==============================] - 0s 210us/sample - loss: 618
.1236
Epoch 1770/4000
6/6 [==============================] - 0s 215us/sample - loss: 613
.4729
Epoch 1771/4000
6/6 [==============================] - 0s 199us/sample - loss: 608
.8120
Epoch 1772/4000
6/6 [==============================] - 0s 14ms/sample - loss: 604.
4064
Epoch 1773/4000
6/6 [==============================] - 0s 328us/sample - loss: 600
.0549
Epoch 1774/4000
6/6 [==============================] - 0s 264us/sample - loss: 595
.9142
```

```
Epoch 1775/4000
6/6 [==============================] - 0s 226us/sample - loss: 591
.2348
Epoch 1776/4000
6/6 [==============================] - 0s 219us/sample - loss: 587
.1810
Epoch 1777/4000
6/6 [==============================] - 0s 218us/sample - loss: 582
.6055
Epoch 1778/4000
6/6 [==============================] - 0s 259us/sample - loss: 578
.4617
Epoch 1779/4000
6/6 [==============================] - 0s 205us/sample - loss: 574
.4281
Epoch 1780/4000
6/6 [==============================] - 0s 203us/sample - loss: 570
.1386
Epoch 1781/4000
6/6 [==============================] - 0s 206us/sample - loss: 565
.9312
Epoch 1782/4000
6/6 [==============================] - 0s 397us/sample - loss: 561
.8285
Epoch 1783/4000
6/6 [==============================] - 0s 255us/sample - loss: 557
.7123
Epoch 1784/4000
6/6 [==============================] - 0s 222us/sample - loss: 553
.6582
Epoch 1785/4000
6/6 [==============================] - 0s 232us/sample - loss: 549
.9172
Epoch 1786/4000
6/6 [==============================] - 0s 252us/sample - loss: 545
.6374
Epoch 1787/4000
6/6 [==============================] - 0s 232us/sample - loss: 541
.8342
Epoch 1788/4000
6/6 [==============================] - 0s 234us/sample - loss: 537
.7065
Epoch 1789/4000
6/6 [==============================] - 0s 229us/sample - loss: 533
.6929
Epoch 1790/4000
6/6 [==============================] - 0s 14ms/sample - loss: 530.
1529
Epoch 1791/4000
6/6 [==============================] - 0s 352us/sample - loss: 526
.1675
Epoch 1792/4000
6/6 [==============================] - 0s 291us/sample - loss: 522
.3030
Epoch 1793/4000
6/6 [==============================] - 0s 234us/sample - loss: 518
.4528
```

```
Epoch 1794/4000
6/6 [==============================] - 0s 264us/sample - loss: 514
.8637
Epoch 1795/4000
6/6 [==============================] - 0s 231us/sample - loss: 511
.0412
Epoch 1796/4000
6/6 [==============================] - 0s 270us/sample - loss: 507
.0981
Epoch 1797/4000
6/6 [==============================] - 0s 227us/sample - loss: 503
.6383
Epoch 1798/4000
6/6 [==============================] - 0s 233us/sample - loss: 499
.8950
Epoch 1799/4000
6/6 [==============================] - 0s 14ms/sample - loss: 496.
3708
Epoch 1800/4000
6/6 [==============================] - 0s 355us/sample - loss: 492
.7188
Epoch 1801/4000
6/6 [==============================] - 0s 272us/sample - loss: 489
.1833
Epoch 1802/4000
6/6 [==============================] - 0s 287us/sample - loss: 485
.6972
Epoch 1803/4000
6/6 [==============================] - 0s 251us/sample - loss: 482
.0847
Epoch 1804/4000
6/6 [==============================] - 0s 262us/sample - loss: 478
.2844
Epoch 1805/4000
6/6 [==============================] - 0s 212us/sample - loss: 474
.9148
Epoch 1806/4000
6/6 [==============================] - 0s 255us/sample - loss: 471
.4967
Epoch 1807/4000
6/6 [==============================] - 0s 199us/sample - loss: 468
.0912
Epoch 1808/4000
6/6 [==============================] - 0s 197us/sample - loss: 464
.8558
Epoch 1809/4000
6/6 [==============================] - 0s 13ms/sample - loss: 461.
2222
Epoch 1810/4000
6/6 [==============================] - 0s 336us/sample - loss: 458
.0411
Epoch 1811/4000
6/6 [==============================] - 0s 238us/sample - loss: 454
.6680
Epoch 1812/4000
6/6 [==============================] - 0s 230us/sample - loss: 451
.1665
```

```
Epoch 1813/4000
6/6 [==============================] - 0s 225us/sample - loss: 448
.1166
Epoch 1814/4000
6/6 [==============================] - 0s 213us/sample - loss: 444
.8059
Epoch 1815/4000
6/6 [==============================] - 0s 270us/sample - loss: 441
.5173
Epoch 1816/4000
6/6 [==============================] - 0s 224us/sample - loss: 438
.2356
Epoch 1817/4000
6/6 [==============================] - 0s 217us/sample - loss: 434
.9598
Epoch 1818/4000
6/6 [==============================] - 0s 237us/sample - loss: 431
.9771
Epoch 1819/4000
6/6 [==============================] - 0s 397us/sample - loss: 428
.6602
Epoch 1820/4000
6/6 [==============================] - 0s 248us/sample - loss: 425
.7816
Epoch 1821/4000
6/6 [==============================] - 0s 245us/sample - loss: 422
.4066
Epoch 1822/4000
6/6 [==============================] - 0s 231us/sample - loss: 419
.6313
Epoch 1823/4000
6/6 [==============================] - 0s 202us/sample - loss: 416
.3802
Epoch 1824/4000
6/6 [==============================] - 0s 226us/sample - loss: 413
.2569
Epoch 1825/4000
6/6 [==============================] - 0s 219us/sample - loss: 410
.3252
Epoch 1826/4000
6/6 [==============================] - 0s 248us/sample - loss: 407
.5965
Epoch 1827/4000
6/6 [==============================] - 0s 232us/sample - loss: 404
.3860
Epoch 1828/4000
6/6 [==============================] - 0s 14ms/sample - loss: 401.
3080
Epoch 1829/4000
6/6 [==============================] - 0s 341us/sample - loss: 398
.6496
Epoch 1830/4000
6/6 [==============================] - 0s 257us/sample - loss: 395
.6509
Epoch 1831/4000
6/6 [==============================] - 0s 216us/sample - loss: 392
.6639
```

```
Epoch 1832/4000
6/6 [==============================] - 0s 245us/sample - loss: 389
.8456
Epoch 1833/4000
6/6 [==============================] - 0s 231us/sample - loss: 387
.2253
Epoch 1834/4000
6/6 [==============================] - 0s 235us/sample - loss: 384
.2702
Epoch 1835/4000
6/6 [==============================] - 0s 237us/sample - loss: 381
.3268
Epoch 1836/4000
6/6 [==============================] - 0s 259us/sample - loss: 378
.5276
Epoch 1837/4000
6/6 [==============================] - 0s 14ms/sample - loss: 375.
9908
Epoch 1838/4000
6/6 [==============================] - 0s 352us/sample - loss: 373
.2399
Epoch 1839/4000
6/6 [==============================] - 0s 282us/sample - loss: 370
.4323
Epoch 1840/4000
6/6 [==============================] - 0s 234us/sample - loss: 367
.7509
Epoch 1841/4000
6/6 [==============================] - 0s 231us/sample - loss: 365
.0849
Epoch 1842/4000
6/6 [==============================] - 0s 197us/sample - loss: 362
.4081
Epoch 1843/4000
6/6 [==============================] - 0s 206us/sample - loss: 359
.6943
Epoch 1844/4000
6/6 [==============================] - 0s 209us/sample - loss: 356
.9660
Epoch 1845/4000
6/6 [==============================] - 0s 14ms/sample - loss: 354.
5067
Epoch 1846/4000
6/6 [==============================] - 0s 351us/sample - loss: 351
.8625
Epoch 1847/4000
6/6 [==============================] - 0s 262us/sample - loss: 349
.3733
Epoch 1848/4000
6/6 [==============================] - 0s 209us/sample - loss: 346
.7692
Epoch 1849/4000
6/6 [==============================] - 0s 216us/sample - loss: 344
.2651
Epoch 1850/4000
6/6 [==============================] - 0s 215us/sample - loss: 341
.7660
```

```
Epoch 1851/4000
6/6 [==============================] - 0s 235us/sample - loss: 339
.4499
Epoch 1852/4000
6/6 [==============================] - 0s 207us/sample - loss: 336
.8524
Epoch 1853/4000
6/6 [==============================] - 0s 194us/sample - loss: 334
.4739
Epoch 1854/4000
6/6 [==============================] - 0s 208us/sample - loss: 332
.0614
Epoch 1855/4000
6/6 [==============================] - 0s 229us/sample - loss: 329
.6695
Epoch 1856/4000
6/6 [==============================] - 0s 394us/sample - loss: 327
.1699
Epoch 1857/4000
6/6 [==============================] - 0s 261us/sample - loss: 324
.7439
Epoch 1858/4000
6/6 [==============================] - 0s 210us/sample - loss: 322
.4863
Epoch 1859/4000
6/6 [==============================] - 0s 216us/sample - loss: 320
.2367
Epoch 1860/4000
6/6 [==============================] - 0s 212us/sample - loss: 317
.8366
Epoch 1861/4000
6/6 [==============================] - 0s 251us/sample - loss: 315
.4455
Epoch 1862/4000
6/6 [==============================] - 0s 215us/sample - loss: 313
.1578
Epoch 1863/4000
6/6 [==============================] - 0s 254us/sample - loss: 310
.9486
Epoch 1864/4000
6/6 [==============================] - 0s 230us/sample - loss: 308
.5138
Epoch 1865/4000
6/6 [==============================] - 0s 209us/sample - loss: 306
.3944
Epoch 1866/4000
6/6 [==============================] - 0s 204us/sample - loss: 304
.2018
Epoch 1867/4000
6/6 [==============================] - 0s 397us/sample - loss: 301
.7762
Epoch 1868/4000
6/6 [==============================] - 0s 263us/sample - loss: 299
.7589
Epoch 1869/4000
6/6 [==============================] - 0s 244us/sample - loss: 297
.5902
```

```
Epoch 1870/4000
6/6 [==============================] - 0s 223us/sample - loss: 295
.3490
Epoch 1871/4000
6/6 [==============================] - 0s 238us/sample - loss: 293
.1962
Epoch 1872/4000
6/6 [==============================] - 0s 210us/sample - loss: 290
.9774
Epoch 1873/4000
6/6 [==============================] - 0s 254us/sample - loss: 288
.9970
Epoch 1874/4000
6/6 [==============================] - 0s 206us/sample - loss: 286
.8469
Epoch 1875/4000
6/6 [==============================] - 0s 233us/sample - loss: 284
.8806
Epoch 1876/4000
6/6 [==============================] - 0s 14ms/sample - loss: 282.
6060
Epoch 1877/4000
6/6 [==============================] - 0s 244us/sample - loss: 280
.5875
Epoch 1878/4000
6/6 [==============================] - 0s 233us/sample - loss: 278
.4836
Epoch 1879/4000
6/6 [==============================] - 0s 248us/sample - loss: 276
.6628
Epoch 1880/4000
6/6 [==============================] - 0s 240us/sample - loss: 274
.5665
Epoch 1881/4000
6/6 [==============================] - 0s 250us/sample - loss: 272
.6814
Epoch 1882/4000
6/6 [==============================] - 0s 233us/sample - loss: 270
.6822
Epoch 1883/4000
6/6 [==============================] - 0s 213us/sample - loss: 268
.6833
Epoch 1884/4000
6/6 [==============================] - 0s 216us/sample - loss: 266
.7932
Epoch 1885/4000
6/6 [==============================] - 0s 14ms/sample - loss: 264.
6768
Epoch 1886/4000
6/6 [==============================] - 0s 338us/sample - loss: 262
.7451
Epoch 1887/4000
6/6 [==============================] - 0s 244us/sample - loss: 261
.0071
Epoch 1888/4000
6/6 [==============================] - 0s 206us/sample - loss: 259
.0888
```

```
Epoch 1889/4000
6/6 [==============================] - 0s 205us/sample - loss: 257
.1456
Epoch 1890/4000
6/6 [==============================] - 0s 248us/sample - loss: 255
.2417
Epoch 1891/4000
6/6 [==============================] - 0s 243us/sample - loss: 253
.5286
Epoch 1892/4000
6/6 [==============================] - 0s 230us/sample - loss: 251
.6380
Epoch 1893/4000
6/6 [==============================] - 0s 208us/sample - loss: 249
.7231
Epoch 1894/4000
6/6 [==============================] - 0s 201us/sample - loss: 247
.8469
Epoch 1895/4000
6/6 [==============================] - 0s 385us/sample - loss: 246
.1588
Epoch 1896/4000
6/6 [==============================] - 0s 291us/sample - loss: 244
.3793
Epoch 1897/4000
6/6 [==============================] - 0s 234us/sample - loss: 242
.5786
Epoch 1898/4000
6/6 [==============================] - 0s 216us/sample - loss: 240
.6987
Epoch 1899/4000
6/6 [==============================] - 0s 245us/sample - loss: 238
.9942
Epoch 1900/4000
6/6 [==============================] - 0s 222us/sample - loss: 237
.3123
Epoch 1901/4000
6/6 [==============================] - 0s 218us/sample - loss: 235
.4408
Epoch 1902/4000
6/6 [==============================] - 0s 224us/sample - loss: 233
.9008
Epoch 1903/4000
6/6 [==============================] - 0s 249us/sample - loss: 232
.2206
Epoch 1904/4000
6/6 [==============================] - 0s 251us/sample - loss: 230
.3977
Epoch 1905/4000
6/6 [==============================] - 0s 378us/sample - loss: 228
.7300
Epoch 1906/4000
6/6 [==============================] - 0s 281us/sample - loss: 227
.1050
Epoch 1907/4000
6/6 [==============================] - 0s 284us/sample - loss: 225
.4494
```

```
Epoch 1908/4000
6/6 [==============================] - 0s 292us/sample - loss: 223
.8477
Epoch 1909/4000
6/6 [==============================] - 0s 211us/sample - loss: 222
.1143
Epoch 1910/4000
6/6 [==============================] - 0s 223us/sample - loss: 220
.4769
Epoch 1911/4000
6/6 [==============================] - 0s 244us/sample - loss: 218
.9194
Epoch 1912/4000
6/6 [==============================] - 0s 212us/sample - loss: 217
.4296
Epoch 1913/4000
6/6 [==============================] - 0s 213us/sample - loss: 215
.7362
Epoch 1914/4000
6/6 [==============================] - 0s 14ms/sample - loss: 214.
1112
Epoch 1915/4000
6/6 [==============================] - 0s 283us/sample - loss: 212
.6490
Epoch 1916/4000
6/6 [==============================] - 0s 254us/sample - loss: 211
.0823
Epoch 1917/4000
6/6 [==============================] - 0s 235us/sample - loss: 209
.5327
Epoch 1918/4000
6/6 [==============================] - 0s 256us/sample - loss: 208
.0175
Epoch 1919/4000
6/6 [==============================] - 0s 227us/sample - loss: 206
.4747
Epoch 1920/4000
6/6 [==============================] - 0s 206us/sample - loss: 205
.1134
Epoch 1921/4000
6/6 [==============================] - 0s 244us/sample - loss: 203
.4783
Epoch 1922/4000
6/6 [==============================] - 0s 205us/sample - loss: 202
.1115
Epoch 1923/4000
6/6 [==============================] - 0s 204us/sample - loss: 200
.6706
Epoch 1924/4000
6/6 [==============================] - 0s 14ms/sample - loss: 199.
2380
Epoch 1925/4000
6/6 [==============================] - 0s 266us/sample - loss: 197
.6765
Epoch 1926/4000
6/6 [==============================] - 0s 219us/sample - loss: 196
.2516
```

```
Epoch 1927/4000
6/6 [==============================] - 0s 240us/sample - loss: 194
.9093
Epoch 1928/4000
6/6 [==============================] - 0s 223us/sample - loss: 193
.4481
Epoch 1929/4000
6/6 [==============================] - 0s 225us/sample - loss: 191
.9155
Epoch 1930/4000
6/6 [==============================] - 0s 229us/sample - loss: 190
.6509
Epoch 1931/4000
6/6 [==============================] - 0s 205us/sample - loss: 189
.1390
Epoch 1932/4000
6/6 [==============================] - 0s 242us/sample - loss: 187
.9382
Epoch 1933/4000
6/6 [==============================] - 0s 428us/sample - loss: 186
.5140
Epoch 1934/4000
6/6 [==============================] - 0s 348us/sample - loss: 185
.0461
Epoch 1935/4000
6/6 [==============================] - 0s 271us/sample - loss: 183
.8052
Epoch 1936/4000
6/6 [==============================] - 0s 208us/sample - loss: 182
.5063
Epoch 1937/4000
6/6 [==============================] - 0s 208us/sample - loss: 181
.0837
Epoch 1938/4000
6/6 [==============================] - 0s 193us/sample - loss: 179
.7182
Epoch 1939/4000
6/6 [==============================] - 0s 242us/sample - loss: 178
.5479
Epoch 1940/4000
6/6 [==============================] - 0s 195us/sample - loss: 177
.1454
Epoch 1941/4000
6/6 [==============================] - 0s 233us/sample - loss: 175
.8127
Epoch 1942/4000
6/6 [==============================] - 0s 14ms/sample - loss: 174.
6639
Epoch 1943/4000
6/6 [==============================] - 0s 312us/sample - loss: 173
.4546
Epoch 1944/4000
6/6 [==============================] - 0s 247us/sample - loss: 172
.0751
Epoch 1945/4000
6/6 [==============================] - 0s 243us/sample - loss: 170
.7357
```

```
Epoch 1946/4000
6/6 [==============================] - 0s 216us/sample - loss: 169
.6035
Epoch 1947/4000
6/6 [==============================] - 0s 260us/sample - loss: 168
.2911
Epoch 1948/4000
6/6 [==============================] - 0s 258us/sample - loss: 167
.1300
Epoch 1949/4000
6/6 [==============================] - 0s 214us/sample - loss: 165
.9329
Epoch 1950/4000
6/6 [==============================] - 0s 241us/sample - loss: 164
.7159
Epoch 1951/4000
6/6 [==============================] - 0s 246us/sample - loss: 163
.4637
Epoch 1952/4000
6/6 [==============================] - 0s 376us/sample - loss: 162
.3604
Epoch 1953/4000
6/6 [==============================] - 0s 327us/sample - loss: 161
.0593
Epoch 1954/4000
6/6 [==============================] - 0s 291us/sample - loss: 159
.9263
Epoch 1955/4000
6/6 [==============================] - 0s 215us/sample - loss: 158
.8267
Epoch 1956/4000
6/6 [==============================] - 0s 227us/sample - loss: 157
.6764
Epoch 1957/4000
6/6 [==============================] - 0s 214us/sample - loss: 156
.5890
Epoch 1958/4000
6/6 [==============================] - 0s 243us/sample - loss: 155
.3319
Epoch 1959/4000
6/6 [==============================] - 0s 199us/sample - loss: 154
.1283
Epoch 1960/4000
6/6 [==============================] - 0s 203us/sample - loss: 153
.0049
Epoch 1961/4000
6/6 [==============================] - 0s 246us/sample - loss: 151
.9937
Epoch 1962/4000
6/6 [==============================] - 0s 13ms/sample - loss: 150.
7908
Epoch 1963/4000
6/6 [==============================] - 0s 342us/sample - loss: 149
.7380
Epoch 1964/4000
6/6 [==============================] - 0s 258us/sample - loss: 148
.7471
```

```
Epoch 1965/4000
6/6 [==============================] - 0s 211us/sample - loss: 147
.6341
Epoch 1966/4000
6/6 [==============================] - 0s 224us/sample - loss: 146
.4487
Epoch 1967/4000
6/6 [==============================] - 0s 239us/sample - loss: 145
.4112
Epoch 1968/4000
6/6 [==============================] - 0s 245us/sample - loss: 144
.3200
Epoch 1969/4000
6/6 [==============================] - 0s 212us/sample - loss: 143
.3381
Epoch 1970/4000
6/6 [==============================] - 0s 213us/sample - loss: 142
.2997
Epoch 1971/4000
6/6 [==============================] - 0s 391us/sample - loss: 141
.3403
Epoch 1972/4000
6/6 [==============================] - 0s 260us/sample - loss: 140
.2317
Epoch 1973/4000
6/6 [==============================] - 0s 273us/sample - loss: 139
.1746
Epoch 1974/4000
6/6 [==============================] - 0s 215us/sample - loss: 138
.1554
Epoch 1975/4000
6/6 [==============================] - 0s 207us/sample - loss: 137
.2946
Epoch 1976/4000
6/6 [==============================] - 0s 214us/sample - loss: 136
.2292
Epoch 1977/4000
6/6 [==============================] - 0s 204us/sample - loss: 135
.2378
Epoch 1978/4000
6/6 [==============================] - 0s 206us/sample - loss: 134
.2293
Epoch 1979/4000
6/6 [==============================] - 0s 197us/sample - loss: 133
.2976
Epoch 1980/4000
6/6 [==============================] - 0s 242us/sample - loss: 132
.2213
Epoch 1981/4000
6/6 [==============================] - 0s 13ms/sample - loss: 131.
1947
Epoch 1982/4000
6/6 [==============================] - 0s 346us/sample - loss: 130
.2984
Epoch 1983/4000
6/6 [==============================] - 0s 265us/sample - loss: 129
.3019
```

```
Epoch 1984/4000
6/6 [==============================] - 0s 228us/sample - loss: 128
.3907
Epoch 1985/4000
6/6 [==============================] - 0s 208us/sample - loss: 127
.5036
Epoch 1986/4000
6/6 [==============================] - 0s 197us/sample - loss: 126
.5181
Epoch 1987/4000
6/6 [==============================] - 0s 209us/sample - loss: 125
.6845
Epoch 1988/4000
6/6 [==============================] - 0s 239us/sample - loss: 124
.7395
Epoch 1989/4000
6/6 [==============================] - 0s 237us/sample - loss: 123
.7907
Epoch 1990/4000
6/6 [==============================] - 0s 244us/sample - loss: 122
.8851
Epoch 1991/4000
6/6 [==============================] - 0s 14ms/sample - loss: 121.
9789
Epoch 1992/4000
6/6 [==============================] - 0s 305us/sample - loss: 121
.0994
Epoch 1993/4000
6/6 [==============================] - 0s 244us/sample - loss: 120
.2193
Epoch 1994/4000
6/6 [==============================] - 0s 266us/sample - loss: 119
.4565
Epoch 1995/4000
6/6 [==============================] - 0s 245us/sample - loss: 118
.4508
Epoch 1996/4000
6/6 [==============================] - 0s 229us/sample - loss: 117
.7068
Epoch 1997/4000
6/6 [==============================] - 0s 204us/sample - loss: 116
.8850
Epoch 1998/4000
6/6 [==============================] - 0s 255us/sample - loss: 115
.9999
Epoch 1999/4000
6/6 [==============================] - 0s 289us/sample - loss: 115
.0661
Epoch 2000/4000
6/6 [==============================] - 0s 267us/sample - loss: 114
.2380
Epoch 2001/4000
6/6 [==============================] - 0s 384us/sample - loss: 113
.4731
Epoch 2002/4000
6/6 [==============================] - 0s 247us/sample - loss: 112
.4929
```

```
Epoch 2003/4000
6/6 [==============================] - 0s 262us/sample - loss: 111
.7859
Epoch 2004/4000
6/6 [==============================] - 0s 238us/sample - loss: 111
.0325
Epoch 2005/4000
6/6 [==============================] - 0s 236us/sample - loss: 110
.1189
Epoch 2006/4000
6/6 [==============================] - 0s 216us/sample - loss: 109
.3749
Epoch 2007/4000
6/6 [==============================] - 0s 213us/sample - loss: 108
.6150
Epoch 2008/4000
6/6 [==============================] - 0s 227us/sample - loss: 107
.9027
Epoch 2009/4000
6/6 [==============================] - 0s 240us/sample - loss: 106
.9607
Epoch 2010/4000
6/6 [==============================] - 0s 205us/sample - loss: 106
.2069
Epoch 2011/4000
6/6 [==============================] - 0s 376us/sample - loss: 105
.4788
Epoch 2012/4000
6/6 [==============================] - 0s 305us/sample - loss: 104
.7768
Epoch 2013/4000
6/6 [==============================] - 0s 238us/sample - loss: 103
.8893
Epoch 2014/4000
6/6 [==============================] - 0s 223us/sample - loss: 103
.1669
Epoch 2015/4000
6/6 [==============================] - 0s 237us/sample - loss: 102
.3354
Epoch 2016/4000
6/6 [==============================] - 0s 236us/sample - loss: 101
.7077
Epoch 2017/4000
6/6 [==============================] - 0s 258us/sample - loss: 100
.9426
Epoch 2018/4000
6/6 [==============================] - 0s 253us/sample - loss: 100
.2204
Epoch 2019/4000
6/6 [==============================] - 0s 14ms/sample - loss: 99.3
934
Epoch 2020/4000
6/6 [==============================] - 0s 296us/sample - loss: 98.
7120
Epoch 2021/4000
6/6 [==============================] - 0s 285us/sample - loss: 98.
0957
```

```
Epoch 2022/4000
6/6 [==============================] - 0s 231us/sample - loss: 97.
3015
Epoch 2023/4000
6/6 [==============================] - 0s 248us/sample - loss: 96.
5881
Epoch 2024/4000
6/6 [==============================] - 0s 244us/sample - loss: 95.
8851
Epoch 2025/4000
6/6 [==============================] - 0s 225us/sample - loss: 95.
2353
Epoch 2026/4000
6/6 [==============================] - 0s 211us/sample - loss: 94.
5337
Epoch 2027/4000
6/6 [==============================] - 0s 226us/sample - loss: 93.
7308
Epoch 2028/4000
6/6 [==============================] - 0s 244us/sample - loss: 93.
0691
Epoch 2029/4000
6/6 [==============================] - 0s 14ms/sample - loss: 92.4
707
Epoch 2030/4000
6/6 [==============================] - 0s 278us/sample - loss: 91.
6996
Epoch 2031/4000
6/6 [==============================] - 0s 231us/sample - loss: 91.
0846
Epoch 2032/4000
6/6 [==============================] - 0s 246us/sample - loss: 90.
4587
Epoch 2033/4000
6/6 [==============================] - 0s 258us/sample - loss: 89.
7905
Epoch 2034/4000
6/6 [==============================] - 0s 244us/sample - loss: 89.
1221
Epoch 2035/4000
6/6 [==============================] - 0s 205us/sample - loss: 88.
5552
Epoch 2036/4000
6/6 [==============================] - 0s 216us/sample - loss: 87.
8187
Epoch 2037/4000
6/6 [==============================] - 0s 247us/sample - loss: 87.
2340
Epoch 2038/4000
6/6 [==============================] - 0s 14ms/sample - loss: 86.5
752
Epoch 2039/4000
6/6 [==============================] - 0s 262us/sample - loss: 85.
9217
Epoch 2040/4000
6/6 [==============================] - 0s 278us/sample - loss: 85.
2966
```

```
Epoch 2041/4000
6/6 [==============================] - 0s 231us/sample - loss: 84.
7205
Epoch 2042/4000
6/6 [==============================] - 0s 291us/sample - loss: 84.
0223
Epoch 2043/4000
6/6 [==============================] - 0s 268us/sample - loss: 83.
4213
Epoch 2044/4000
6/6 [==============================] - 0s 227us/sample - loss: 82.
8468
Epoch 2045/4000
6/6 [==============================] - 0s 220us/sample - loss: 82.
2719
Epoch 2046/4000
6/6 [==============================] - 0s 252us/sample - loss: 81.
6283
Epoch 2047/4000
6/6 [==============================] - 0s 258us/sample - loss: 81.
0448
Epoch 2048/4000
6/6 [==============================] - 0s 13ms/sample - loss: 80.4
832
Epoch 2049/4000
6/6 [==============================] - 0s 305us/sample - loss: 79.
9000
Epoch 2050/4000
6/6 [==============================] - 0s 302us/sample - loss: 79.
2379
Epoch 2051/4000
6/6 [==============================] - 0s 259us/sample - loss: 78.
7852
Epoch 2052/4000
6/6 [==============================] - 0s 211us/sample - loss: 78.
1373
Epoch 2053/4000
6/6 [==============================] - 0s 240us/sample - loss: 77.
5352
Epoch 2054/4000
6/6 [==============================] - 0s 211us/sample - loss: 77.
0349
Epoch 2055/4000
6/6 [==============================] - 0s 247us/sample - loss: 76.
4496
Epoch 2056/4000
6/6 [==============================] - 0s 297us/sample - loss: 75.
9373
Epoch 2057/4000
6/6 [==============================] - 0s 14ms/sample - loss: 75.2
244
Epoch 2058/4000
6/6 [==============================] - 0s 360us/sample - loss: 74.
7583
Epoch 2059/4000
6/6 [==============================] - 0s 251us/sample - loss: 74.
1914
```

```
Epoch 2060/4000
6/6 [==============================] - 0s 310us/sample - loss: 73.
7325
Epoch 2061/4000
6/6 [==============================] - 0s 209us/sample - loss: 73.
1534
Epoch 2062/4000
6/6 [==============================] - 0s 225us/sample - loss: 72.
6247
Epoch 2063/4000
6/6 [==============================] - 0s 228us/sample - loss: 72.
0472
Epoch 2064/4000
6/6 [==============================] - 0s 248us/sample - loss: 71.
6541
Epoch 2065/4000
6/6 [==============================] - 0s 248us/sample - loss: 71.
1280
Epoch 2066/4000
6/6 [==============================] - 0s 223us/sample - loss: 70.
5154
Epoch 2067/4000
6/6 [==============================] - 0s 220us/sample - loss: 70.
0643
Epoch 2068/4000
6/6 [==============================] - 0s 13ms/sample - loss: 69.5
451
Epoch 2069/4000
6/6 [==============================] - 0s 294us/sample - loss: 69.
0675
Epoch 2070/4000
6/6 [==============================] - 0s 241us/sample - loss: 68.
4640
Epoch 2071/4000
6/6 [==============================] - 0s 250us/sample - loss: 67.
9737
Epoch 2072/4000
6/6 [==============================] - 0s 227us/sample - loss: 67.
5453
Epoch 2073/4000
6/6 [==============================] - 0s 217us/sample - loss: 67.
0438
Epoch 2074/4000
6/6 [==============================] - 0s 206us/sample - loss: 66.
5712
Epoch 2075/4000
6/6 [==============================] - 0s 221us/sample - loss: 66.
1391
Epoch 2076/4000
6/6 [==============================] - 0s 14ms/sample - loss: 65.6
203
Epoch 2077/4000
6/6 [==============================] - 0s 303us/sample - loss: 65.
1161
Epoch 2078/4000
6/6 [==============================] - 0s 248us/sample - loss: 64.
6602
```

```
Epoch 2079/4000
6/6 [==============================] - 0s 236us/sample - loss: 64.
2284
Epoch 2080/4000
6/6 [==============================] - 0s 235us/sample - loss: 63.
7676
Epoch 2081/4000
6/6 [==============================] - 0s 234us/sample - loss: 63.
2803
Epoch 2082/4000
6/6 [==============================] - 0s 209us/sample - loss: 62.
8212
Epoch 2083/4000
6/6 [==============================] - 0s 209us/sample - loss: 62.
4014
Epoch 2084/4000
6/6 [==============================] - 0s 224us/sample - loss: 61.
8976
Epoch 2085/4000
6/6 [==============================] - 0s 243us/sample - loss: 61.
4079
Epoch 2086/4000
6/6 [==============================] - 0s 232us/sample - loss: 60.
9653
Epoch 2087/4000
6/6 [==============================] - 0s 210us/sample - loss: 60.
5026
Epoch 2088/4000
6/6 [==============================] - 0s 276us/sample - loss: 60.
0986
Epoch 2089/4000
6/6 [==============================] - 0s 229us/sample - loss: 59.
6880
Epoch 2090/4000
6/6 [==============================] - 0s 260us/sample - loss: 59.
2482
Epoch 2091/4000
6/6 [==============================] - 0s 258us/sample - loss: 58.
8406
Epoch 2092/4000
6/6 [==============================] - 0s 230us/sample - loss: 58.
4041
Epoch 2093/4000
6/6 [==============================] - 0s 254us/sample - loss: 57.
9994
Epoch 2094/4000
6/6 [==============================] - 0s 229us/sample - loss: 57.
5661
Epoch 2095/4000
6/6 [==============================] - 0s 225us/sample - loss: 57.
1644
Epoch 2096/4000
6/6 [==============================] - 0s 224us/sample - loss: 56.
7688
Epoch 2097/4000
6/6 [==============================] - 0s 14ms/sample - loss: 56.3
252
```

```
Epoch 2098/4000
6/6 [==============================] - 0s 272us/sample - loss: 55.
9192
Epoch 2099/4000
6/6 [==============================] - 0s 287us/sample - loss: 55.
4936
Epoch 2100/4000
6/6 [==============================] - 0s 233us/sample - loss: 55.
0992
Epoch 2101/4000
6/6 [==============================] - 0s 236us/sample - loss: 54.
6768
Epoch 2102/4000
6/6 [==============================] - 0s 230us/sample - loss: 54.
3235
Epoch 2103/4000
6/6 [==============================] - 0s 241us/sample - loss: 53.
9333
Epoch 2104/4000
6/6 [==============================] - 0s 265us/sample - loss: 53.
5154
Epoch 2105/4000
6/6 [==============================] - 0s 211us/sample - loss: 53.
0867
Epoch 2106/4000
6/6 [==============================] - 0s 241us/sample - loss: 52.
6359
Epoch 2107/4000
6/6 [==============================] - 0s 276us/sample - loss: 52.
2564
Epoch 2108/4000
6/6 [==============================] - 0s 226us/sample - loss: 51.
8635
Epoch 2109/4000
6/6 [==============================] - 0s 245us/sample - loss: 51.
5450
Epoch 2110/4000
6/6 [==============================] - 0s 240us/sample - loss: 51.
1705
Epoch 2111/4000
6/6 [==============================] - 0s 250us/sample - loss: 50.
8289
Epoch 2112/4000
6/6 [==============================] - 0s 245us/sample - loss: 50.
4230
Epoch 2113/4000
6/6 [==============================] - 0s 235us/sample - loss: 50.
0763
Epoch 2114/4000
6/6 [==============================] - 0s 232us/sample - loss: 49.
7438
Epoch 2115/4000
6/6 [==============================] - 0s 237us/sample - loss: 49.
4024
Epoch 2116/4000
6/6 [==============================] - 0s 14ms/sample - loss: 48.9
721
```

```
Epoch 2117/4000
6/6 [==============================] - 0s 272us/sample - loss: 48.
6240
Epoch 2118/4000
6/6 [==============================] - 0s 229us/sample - loss: 48.
2572
Epoch 2119/4000
6/6 [==============================] - 0s 240us/sample - loss: 47.
9255
Epoch 2120/4000
6/6 [==============================] - 0s 219us/sample - loss: 47.
5315
Epoch 2121/4000
6/6 [==============================] - 0s 234us/sample - loss: 47.
2321
Epoch 2122/4000
6/6 [==============================] - 0s 210us/sample - loss: 46.
8994
Epoch 2123/4000
6/6 [==============================] - 0s 230us/sample - loss: 46.
5073
Epoch 2124/4000
6/6 [==============================] - 0s 215us/sample - loss: 46.
1392
Epoch 2125/4000
6/6 [==============================] - 0s 212us/sample - loss: 45.
8145
Epoch 2126/4000
6/6 [==============================] - 0s 14ms/sample - loss: 45.4
914
Epoch 2127/4000
6/6 [==============================] - 0s 255us/sample - loss: 45.
2403
Epoch 2128/4000
6/6 [==============================] - 0s 250us/sample - loss: 44.
8552
Epoch 2129/4000
6/6 [==============================] - 0s 250us/sample - loss: 44.
5245
Epoch 2130/4000
6/6 [==============================] - 0s 238us/sample - loss: 44.
2361
Epoch 2131/4000
6/6 [==============================] - 0s 256us/sample - loss: 43.
9775
Epoch 2132/4000
6/6 [==============================] - 0s 225us/sample - loss: 43.
5370
Epoch 2133/4000
6/6 [==============================] - 0s 280us/sample - loss: 43.
2804
Epoch 2134/4000
6/6 [==============================] - 0s 244us/sample - loss: 42.
9570
Epoch 2135/4000
6/6 [==============================] - 0s 14ms/sample - loss: 42.6
724
```

```
Epoch 2136/4000
6/6 [==============================] - 0s 246us/sample - loss: 42.
3093
Epoch 2137/4000
6/6 [==============================] - 0s 229us/sample - loss: 42.
0562
Epoch 2138/4000
6/6 [==============================] - 0s 247us/sample - loss: 41.
7209
Epoch 2139/4000
6/6 [==============================] - 0s 308us/sample - loss: 41.
4277
Epoch 2140/4000
6/6 [==============================] - 0s 244us/sample - loss: 41.
0627
Epoch 2141/4000
6/6 [==============================] - 0s 216us/sample - loss: 40.
8136
Epoch 2142/4000
6/6 [==============================] - 0s 282us/sample - loss: 40.
4500
Epoch 2143/4000
6/6 [==============================] - 0s 262us/sample - loss: 40.
1709
Epoch 2144/4000
6/6 [==============================] - 0s 249us/sample - loss: 39.
8978
Epoch 2145/4000
6/6 [==============================] - 0s 314us/sample - loss: 39.
6586
Epoch 2146/4000
6/6 [==============================] - 0s 259us/sample - loss: 39.
2952
Epoch 2147/4000
6/6 [==============================] - 0s 226us/sample - loss: 39.
1195
Epoch 2148/4000
6/6 [==============================] - 0s 244us/sample - loss: 38.
8482
Epoch 2149/4000
6/6 [==============================] - 0s 264us/sample - loss: 38.
4803
Epoch 2150/4000
6/6 [==============================] - 0s 253us/sample - loss: 38.
2512
Epoch 2151/4000
6/6 [==============================] - 0s 242us/sample - loss: 37.
9520
Epoch 2152/4000
6/6 [==============================] - 0s 236us/sample - loss: 37.
6878
Epoch 2153/4000
6/6 [==============================] - 0s 269us/sample - loss: 37.
4614
Epoch 2154/4000
6/6 [==============================] - 0s 14ms/sample - loss: 37.1
287
```

```
Epoch 2155/4000
6/6 [==============================] - 0s 279us/sample - loss: 36.
8674
Epoch 2156/4000
6/6 [==============================] - 0s 257us/sample - loss: 36.
6314
Epoch 2157/4000
6/6 [==============================] - 0s 221us/sample - loss: 36.
3024
Epoch 2158/4000
6/6 [==============================] - 0s 238us/sample - loss: 36.
0800
Epoch 2159/4000
6/6 [==============================] - 0s 242us/sample - loss: 35.
8465
Epoch 2160/4000
6/6 [==============================] - 0s 229us/sample - loss: 35.
5329
Epoch 2161/4000
6/6 [==============================] - 0s 222us/sample - loss: 35.
3132
Epoch 2162/4000
6/6 [==============================] - 0s 208us/sample - loss: 34.
9900
Epoch 2163/4000
6/6 [==============================] - 0s 221us/sample - loss: 34.
7364
Epoch 2164/4000
6/6 [==============================] - 0s 14ms/sample - loss: 34.5
073
Epoch 2165/4000
6/6 [==============================] - 0s 332us/sample - loss: 34.
2250
Epoch 2166/4000
6/6 [==============================] - 0s 318us/sample - loss: 34.
0240
Epoch 2167/4000
6/6 [==============================] - 0s 245us/sample - loss: 33.
7817
Epoch 2168/4000
6/6 [==============================] - 0s 259us/sample - loss: 33.
5557
Epoch 2169/4000
6/6 [==============================] - 0s 250us/sample - loss: 33.
2890
Epoch 2170/4000
6/6 [==============================] - 0s 232us/sample - loss: 33.
0564
Epoch 2171/4000
6/6 [==============================] - 0s 220us/sample - loss: 32.
8406
Epoch 2172/4000
6/6 [==============================] - 0s 223us/sample - loss: 32.
5950
Epoch 2173/4000
6/6 [==============================] - 0s 208us/sample - loss: 32.
3212
```

```
Epoch 2174/4000
6/6 [==============================] - 0s 13ms/sample - loss: 32.1
547
Epoch 2175/4000
6/6 [==============================] - 0s 248us/sample - loss: 31.
8803
Epoch 2176/4000
6/6 [==============================] - 0s 216us/sample - loss: 31.
6629
Epoch 2177/4000
6/6 [==============================] - 0s 267us/sample - loss: 31.
3940
Epoch 2178/4000
6/6 [==============================] - 0s 229us/sample - loss: 31.
2048
Epoch 2179/4000
6/6 [==============================] - 0s 233us/sample - loss: 30.
9366
Epoch 2180/4000
6/6 [==============================] - 0s 220us/sample - loss: 30.
7454
Epoch 2181/4000
6/6 [==============================] - 0s 224us/sample - loss: 30.
5153
Epoch 2182/4000
6/6 [==============================] - 0s 243us/sample - loss: 30.
2929
Epoch 2183/4000
6/6 [==============================] - 0s 326us/sample - loss: 30.
0297
Epoch 2184/4000
6/6 [==============================] - 0s 247us/sample - loss: 29.
8760
Epoch 2185/4000
6/6 [==============================] - 0s 225us/sample - loss: 29.
5899
Epoch 2186/4000
6/6 [==============================] - 0s 284us/sample - loss: 29.
3958
Epoch 2187/4000
6/6 [==============================] - 0s 226us/sample - loss: 29.
1706
Epoch 2188/4000
6/6 [==============================] - 0s 219us/sample - loss: 28.
9606
Epoch 2189/4000
6/6 [==============================] - 0s 218us/sample - loss: 28.
7372
Epoch 2190/4000
6/6 [==============================] - 0s 203us/sample - loss: 28.
5043
Epoch 2191/4000
6/6 [==============================] - 0s 201us/sample - loss: 28.
3282
Epoch 2192/4000
6/6 [==============================] - 0s 202us/sample - loss: 28.
1262
```

```
Epoch 2193/4000
6/6 [==============================] - 0s 14ms/sample - loss: 27.8
895
Epoch 2194/4000
6/6 [==============================] - 0s 305us/sample - loss: 27.
7249
Epoch 2195/4000
6/6 [==============================] - 0s 219us/sample - loss: 27.
5249
Epoch 2196/4000
6/6 [==============================] - 0s 233us/sample - loss: 27.
3522
Epoch 2197/4000
6/6 [==============================] - 0s 226us/sample - loss: 27.
1246
Epoch 2198/4000
6/6 [==============================] - 0s 238us/sample - loss: 26.
8997
Epoch 2199/4000
6/6 [==============================] - 0s 254us/sample - loss: 26.
7560
Epoch 2200/4000
6/6 [==============================] - 0s 239us/sample - loss: 26.
5311
Epoch 2201/4000
6/6 [==============================] - 0s 218us/sample - loss: 26.
3318
Epoch 2202/4000
6/6 [==============================] - 0s 200us/sample - loss: 26.
1676
Epoch 2203/4000
6/6 [==============================] - 0s 14ms/sample - loss: 25.9
596
Epoch 2204/4000
6/6 [==============================] - 0s 270us/sample - loss: 25.
8184
Epoch 2205/4000
6/6 [==============================] - 0s 217us/sample - loss: 25.
6277
Epoch 2206/4000
6/6 [==============================] - 0s 235us/sample - loss: 25.
3789
Epoch 2207/4000
6/6 [==============================] - 0s 232us/sample - loss: 25.
2133
Epoch 2208/4000
6/6 [==============================] - 0s 260us/sample - loss: 25.
0224
Epoch 2209/4000
6/6 [==============================] - 0s 263us/sample - loss: 24.
8523
Epoch 2210/4000
6/6 [==============================] - 0s 242us/sample - loss: 24.
6596
Epoch 2211/4000
6/6 [==============================] - 0s 14ms/sample - loss: 24.4
436
```

```
Epoch 2212/4000
6/6 [==============================] - 0s 310us/sample - loss: 24.
3208
Epoch 2213/4000
6/6 [==============================] - 0s 269us/sample - loss: 24.
1160
Epoch 2214/4000
6/6 [==============================] - 0s 224us/sample - loss: 23.
9181
Epoch 2215/4000
6/6 [==============================] - 0s 314us/sample - loss: 23.
7598
Epoch 2216/4000
6/6 [==============================] - 0s 230us/sample - loss: 23.
6152
Epoch 2217/4000
6/6 [==============================] - 0s 250us/sample - loss: 23.
4080
Epoch 2218/4000
6/6 [==============================] - 0s 207us/sample - loss: 23.
2724
Epoch 2219/4000
6/6 [==============================] - 0s 208us/sample - loss: 23.
0844
Epoch 2220/4000
6/6 [==============================] - 0s 259us/sample - loss: 22.
9651
Epoch 2221/4000
6/6 [==============================] - 0s 14ms/sample - loss: 22.7
878
Epoch 2222/4000
6/6 [==============================] - 0s 255us/sample - loss: 22.
6255
Epoch 2223/4000
6/6 [==============================] - 0s 242us/sample - loss: 22.
4133
Epoch 2224/4000
6/6 [==============================] - 0s 266us/sample - loss: 22.
3256
Epoch 2225/4000
6/6 [==============================] - 0s 252us/sample - loss: 22.
1295
Epoch 2226/4000
6/6 [==============================] - 0s 261us/sample - loss: 21.
9586
Epoch 2227/4000
6/6 [==============================] - 0s 237us/sample - loss: 21.
7883
Epoch 2228/4000
6/6 [==============================] - 0s 206us/sample - loss: 21.
6633
Epoch 2229/4000
6/6 [==============================] - 0s 238us/sample - loss: 21.
4699
Epoch 2230/4000
6/6 [==============================] - 0s 208us/sample - loss: 21.
3124
```

```
Epoch 2231/4000
6/6 [==============================] - 0s 14ms/sample - loss: 21.1
340
Epoch 2232/4000
6/6 [==============================] - 0s 309us/sample - loss: 21.
0275
Epoch 2233/4000
6/6 [==============================] - 0s 308us/sample - loss: 20.
8518
Epoch 2234/4000
6/6 [==============================] - 0s 271us/sample - loss: 20.
6951
Epoch 2235/4000
6/6 [==============================] - 0s 217us/sample - loss: 20.
5268
Epoch 2236/4000
6/6 [==============================] - 0s 221us/sample - loss: 20.
4339
Epoch 2237/4000
6/6 [==============================] - 0s 214us/sample - loss: 20.
2323
Epoch 2238/4000
6/6 [==============================] - 0s 206us/sample - loss: 20.
1064
Epoch 2239/4000
6/6 [==============================] - 0s 230us/sample - loss: 19.
9200
Epoch 2240/4000
6/6 [==============================] - 0s 226us/sample - loss: 19.
7885
Epoch 2241/4000
6/6 [==============================] - 0s 13ms/sample - loss: 19.6
382
Epoch 2242/4000
6/6 [==============================] - 0s 280us/sample - loss: 19.
5474
Epoch 2243/4000
6/6 [==============================] - 0s 215us/sample - loss: 19.
4059
Epoch 2244/4000
6/6 [==============================] - 0s 209us/sample - loss: 19.
2570
Epoch 2245/4000
6/6 [==============================] - 0s 237us/sample - loss: 19.
1541
Epoch 2246/4000
6/6 [==============================] - 0s 265us/sample - loss: 18.
9776
Epoch 2247/4000
6/6 [==============================] - 0s 222us/sample - loss: 18.
8370
Epoch 2248/4000
6/6 [==============================] - 0s 239us/sample - loss: 18.
6887
Epoch 2249/4000
6/6 [==============================] - 0s 245us/sample - loss: 18.
5675
```

```
Epoch 2250/4000
6/6 [==============================] - 0s 246us/sample - loss: 18.
4879
Epoch 2251/4000
6/6 [==============================] - 0s 14ms/sample - loss: 18.3
155
Epoch 2252/4000
6/6 [==============================] - 0s 278us/sample - loss: 18.
1894
Epoch 2253/4000
6/6 [==============================] - 0s 253us/sample - loss: 18.
0528
Epoch 2254/4000
6/6 [==============================] - 0s 205us/sample - loss: 17.
9338
Epoch 2255/4000
6/6 [==============================] - 0s 226us/sample - loss: 17.
8089
Epoch 2256/4000
6/6 [==============================] - 0s 227us/sample - loss: 17.
6399
Epoch 2257/4000
6/6 [==============================] - 0s 241us/sample - loss: 17.
5624
Epoch 2258/4000
6/6 [==============================] - 0s 203us/sample - loss: 17.
4252
Epoch 2259/4000
6/6 [==============================] - 0s 218us/sample - loss: 17.
3022
Epoch 2260/4000
6/6 [==============================] - 0s 243us/sample - loss: 17.
1677
Epoch 2261/4000
6/6 [==============================] - 0s 257us/sample - loss: 17.
0007
Epoch 2262/4000
6/6 [==============================] - 0s 14ms/sample - loss: 16.9
039
Epoch 2263/4000
6/6 [==============================] - 0s 325us/sample - loss: 16.
7651
Epoch 2264/4000
6/6 [==============================] - 0s 241us/sample - loss: 16.
6340
Epoch 2265/4000
6/6 [==============================] - 0s 226us/sample - loss: 16.
5342
Epoch 2266/4000
6/6 [==============================] - 0s 234us/sample - loss: 16.
4133
Epoch 2267/4000
6/6 [==============================] - 0s 260us/sample - loss: 16.
2937
Epoch 2268/4000
6/6 [==============================] - 0s 242us/sample - loss: 16.
1635
```

```
Epoch 2269/4000
6/6 [==============================] - 0s 261us/sample - loss: 16.
0449
Epoch 2270/4000
6/6 [==============================] - 0s 249us/sample - loss: 15.
9348
Epoch 2271/4000
6/6 [==============================] - 0s 395us/sample - loss: 15.
8170
Epoch 2272/4000
6/6 [==============================] - 0s 270us/sample - loss: 15.
7237
Epoch 2273/4000
6/6 [==============================] - 0s 256us/sample - loss: 15.
6068
Epoch 2274/4000
6/6 [==============================] - 0s 262us/sample - loss: 15.
4983
Epoch 2275/4000
6/6 [==============================] - 0s 246us/sample - loss: 15.
3822
Epoch 2276/4000
6/6 [==============================] - 0s 223us/sample - loss: 15.
2901
Epoch 2277/4000
6/6 [==============================] - 0s 208us/sample - loss: 15.
1749
Epoch 2278/4000
6/6 [==============================] - 0s 265us/sample - loss: 15.
0680
Epoch 2279/4000
6/6 [==============================] - 0s 285us/sample - loss: 14.
9536
Epoch 2280/4000
6/6 [==============================] - 0s 14ms/sample - loss: 14.8
627
Epoch 2281/4000
6/6 [==============================] - 0s 252us/sample - loss: 14.
7492
Epoch 2282/4000
6/6 [==============================] - 0s 256us/sample - loss: 14.
6438
Epoch 2283/4000
6/6 [==============================] - 0s 298us/sample - loss: 14.
5311
Epoch 2284/4000
6/6 [==============================] - 0s 274us/sample - loss: 14.
4415
Epoch 2285/4000
6/6 [==============================] - 0s 278us/sample - loss: 14.
3297
Epoch 2286/4000
6/6 [==============================] - 0s 227us/sample - loss: 14.
2258
Epoch 2287/4000
6/6 [==============================] - 0s 307us/sample - loss: 14.
1149
```

```
Epoch 2288/4000
6/6 [==============================] - 0s 272us/sample - loss: 14.
0146
Epoch 2289/4000
6/6 [==============================] - 0s 204us/sample - loss: 13.
8948
Epoch 2290/4000
6/6 [==============================] - 0s 333us/sample - loss: 13.
8241
Epoch 2291/4000
6/6 [==============================] - 0s 267us/sample - loss: 13.
6978
Epoch 2292/4000
6/6 [==============================] - 0s 242us/sample - loss: 13.
6057
Epoch 2293/4000
6/6 [==============================] - 0s 267us/sample - loss: 13.
4877
Epoch 2294/4000
6/6 [==============================] - 0s 198us/sample - loss: 13.
4180
Epoch 2295/4000
6/6 [==============================] - 0s 249us/sample - loss: 13.
2936
Epoch 2296/4000
6/6 [==============================] - 0s 232us/sample - loss: 13.
2050
Epoch 2297/4000
6/6 [==============================] - 0s 253us/sample - loss: 13.
1195
Epoch 2298/4000
6/6 [==============================] - 0s 215us/sample - loss: 13.
0129
Epoch 2299/4000
6/6 [==============================] - 0s 224us/sample - loss: 12.
9140
Epoch 2300/4000
6/6 [==============================] - 0s 14ms/sample - loss: 12.8
082
Epoch 2301/4000
6/6 [==============================] - 0s 269us/sample - loss: 12.
7128
Epoch 2302/4000
6/6 [==============================] - 0s 230us/sample - loss: 12.
5987
Epoch 2303/4000
6/6 [==============================] - 0s 260us/sample - loss: 12.
5315
Epoch 2304/4000
6/6 [==============================] - 0s 230us/sample - loss: 12.
4111
Epoch 2305/4000
6/6 [==============================] - 0s 248us/sample - loss: 12.
3235
Epoch 2306/4000
6/6 [==============================] - 0s 249us/sample - loss: 12.
2112
```

```
Epoch 2307/4000
6/6 [==============================] - 0s 219us/sample - loss: 12.
1670
Epoch 2308/4000
6/6 [==============================] - 0s 206us/sample - loss: 12.
0954
Epoch 2309/4000
6/6 [==============================] - 0s 260us/sample - loss: 11.
9623
Epoch 2310/4000
6/6 [==============================] - 0s 14ms/sample - loss: 11.8
720
Epoch 2311/4000
6/6 [==============================] - 0s 282us/sample - loss: 11.
8154
Epoch 2312/4000
6/6 [==============================] - 0s 229us/sample - loss: 11.
7333
Epoch 2313/4000
6/6 [==============================] - 0s 210us/sample - loss: 11.
6791
Epoch 2314/4000
6/6 [==============================] - 0s 202us/sample - loss: 11.
5651
Epoch 2315/4000
6/6 [==============================] - 0s 205us/sample - loss: 11.
4960
Epoch 2316/4000
6/6 [==============================] - 0s 227us/sample - loss: 11.
4329
Epoch 2317/4000
6/6 [==============================] - 0s 216us/sample - loss: 11.
3082
Epoch 2318/4000
6/6 [==============================] - 0s 221us/sample - loss: 11.
2397
Epoch 2319/4000
6/6 [==============================] - 0s 221us/sample - loss: 11.
1562
Epoch 2320/4000
6/6 [==============================] - 0s 225us/sample - loss: 11.
0790
Epoch 2321/4000
6/6 [==============================] - 0s 13ms/sample - loss: 10.9
981
Epoch 2322/4000
6/6 [==============================] - 0s 270us/sample - loss: 10.
9353
Epoch 2323/4000
6/6 [==============================] - 0s 236us/sample - loss: 10.
8379
Epoch 2324/4000
6/6 [==============================] - 0s 262us/sample - loss: 10.
7722
Epoch 2325/4000
6/6 [==============================] - 0s 280us/sample - loss: 10.
7100
```

```
Epoch 2326/4000
6/6 [==============================] - 0s 233us/sample - loss: 10.
5907
Epoch 2327/4000
6/6 [==============================] - 0s 240us/sample - loss: 10.
5243
Epoch 2328/4000
6/6 [==============================] - 0s 254us/sample - loss: 10.
4584
Epoch 2329/4000
6/6 [==============================] - 0s 269us/sample - loss: 10.
3632
Epoch 2330/4000
6/6 [==============================] - 0s 241us/sample - loss: 10.
3097
Epoch 2331/4000
6/6 [==============================] - 0s 274us/sample - loss: 10.
2323
Epoch 2332/4000
6/6 [==============================] - 0s 296us/sample - loss: 10.
1705
Epoch 2333/4000
6/6 [==============================] - 0s 245us/sample - loss: 10.
0483
Epoch 2334/4000
6/6 [==============================] - 0s 272us/sample - loss: 9.9
838
Epoch 2335/4000
6/6 [==============================] - 0s 255us/sample - loss: 9.9
082
Epoch 2336/4000
6/6 [==============================] - 0s 248us/sample - loss: 9.8
611
Epoch 2337/4000
6/6 [==============================] - 0s 217us/sample - loss: 9.7
749
Epoch 2338/4000
6/6 [==============================] - 0s 220us/sample - loss: 9.6
828
Epoch 2339/4000
6/6 [==============================] - 0s 264us/sample - loss: 9.6
348
Epoch 2340/4000
6/6 [==============================] - 0s 14ms/sample - loss: 9.56
20
Epoch 2341/4000
6/6 [==============================] - 0s 246us/sample - loss: 9.4
904
Epoch 2342/4000
6/6 [==============================] - 0s 261us/sample - loss: 9.3
872
Epoch 2343/4000
6/6 [==============================] - 0s 237us/sample - loss: 9.3
295
Epoch 2344/4000
6/6 [==============================] - 0s 228us/sample - loss: 9.2
483
```

```
Epoch 2345/4000
6/6 [==============================] - 0s 239us/sample - loss: 9.1
977
Epoch 2346/4000
6/6 [==============================] - 0s 231us/sample - loss: 9.1
353
Epoch 2347/4000
6/6 [==============================] - 0s 252us/sample - loss: 9.0
530
Epoch 2348/4000
6/6 [==============================] - 0s 14ms/sample - loss: 9.00
49
Epoch 2349/4000
6/6 [==============================] - 0s 256us/sample - loss: 8.9
372
Epoch 2350/4000
6/6 [==============================] - 0s 219us/sample - loss: 8.8
894
Epoch 2351/4000
6/6 [==============================] - 0s 212us/sample - loss: 8.8
082
Epoch 2352/4000
6/6 [==============================] - 0s 251us/sample - loss: 8.7
743
Epoch 2353/4000
6/6 [==============================] - 0s 213us/sample - loss: 8.7
064
Epoch 2354/4000
6/6 [==============================] - 0s 228us/sample - loss: 8.6
642
Epoch 2355/4000
6/6 [==============================] - 0s 200us/sample - loss: 8.5
650
Epoch 2356/4000
6/6 [==============================] - 0s 202us/sample - loss: 8.5
066
Epoch 2357/4000
6/6 [==============================] - 0s 208us/sample - loss: 8.4
666
Epoch 2358/4000
6/6 [==============================] - 0s 214us/sample - loss: 8.4
065
Epoch 2359/4000
6/6 [==============================] - 0s 14ms/sample - loss: 8.33
08
Epoch 2360/4000
6/6 [==============================] - 0s 325us/sample - loss: 8.2
863
Epoch 2361/4000
6/6 [==============================] - 0s 225us/sample - loss: 8.2
164
Epoch 2362/4000
6/6 [==============================] - 0s 206us/sample - loss: 8.1
709
Epoch 2363/4000
6/6 [==============================] - 0s 253us/sample - loss: 8.0
780
```

```
Epoch 2364/4000
6/6 [==============================] - 0s 272us/sample - loss: 8.0
343
Epoch 2365/4000
6/6 [==============================] - 0s 262us/sample - loss: 7.9
956
Epoch 2366/4000
6/6 [==============================] - 0s 193us/sample - loss: 7.9
549
Epoch 2367/4000
6/6 [==============================] - 0s 203us/sample - loss: 7.8
469
Epoch 2368/4000
6/6 [==============================] - 0s 244us/sample - loss: 7.8
075
Epoch 2369/4000
6/6 [==============================] - 0s 222us/sample - loss: 7.7
398
Epoch 2370/4000
6/6 [==============================] - 0s 14ms/sample - loss: 7.71
67
Epoch 2371/4000
6/6 [==============================] - 0s 251us/sample - loss: 7.6
355
Epoch 2372/4000
6/6 [==============================] - 0s 270us/sample - loss: 7.5
929
Epoch 2373/4000
6/6 [==============================] - 0s 242us/sample - loss: 7.5
263
Epoch 2374/4000
6/6 [==============================] - 0s 244us/sample - loss: 7.4
861
Epoch 2375/4000
6/6 [==============================] - 0s 300us/sample - loss: 7.3
983
Epoch 2376/4000
6/6 [==============================] - 0s 212us/sample - loss: 7.3
603
Epoch 2377/4000
6/6 [==============================] - 0s 208us/sample - loss: 7.3
069
Epoch 2378/4000
6/6 [==============================] - 0s 239us/sample - loss: 7.2
511
Epoch 2379/4000
6/6 [==============================] - 0s 206us/sample - loss: 7.1
724
Epoch 2380/4000
6/6 [==============================] - 0s 13ms/sample - loss: 7.13
51
Epoch 2381/4000
6/6 [==============================] - 0s 227us/sample - loss: 7.0
853
Epoch 2382/4000
6/6 [==============================] - 0s 218us/sample - loss: 7.0
484
```

```
Epoch 2383/4000
6/6 [==============================] - 0s 211us/sample - loss: 6.9
463
Epoch 2384/4000
6/6 [==============================] - 0s 199us/sample - loss: 6.9
163
Epoch 2385/4000
6/6 [==============================] - 0s 249us/sample - loss: 6.8
645
Epoch 2386/4000
6/6 [==============================] - 0s 253us/sample - loss: 6.8
321
Epoch 2387/4000
6/6 [==============================] - 0s 208us/sample - loss: 6.7
439
Epoch 2388/4000
6/6 [==============================] - 0s 247us/sample - loss: 6.7
079
Epoch 2389/4000
6/6 [==============================] - 0s 220us/sample - loss: 6.6
550
Epoch 2390/4000
6/6 [==============================] - 0s 14ms/sample - loss: 6.60
69
Epoch 2391/4000
6/6 [==============================] - 0s 277us/sample - loss: 6.5
674
Epoch 2392/4000
6/6 [==============================] - 0s 263us/sample - loss: 6.5
434
Epoch 2393/4000
6/6 [==============================] - 0s 213us/sample - loss: 6.4
818
Epoch 2394/4000
6/6 [==============================] - 0s 247us/sample - loss: 6.4
488
Epoch 2395/4000
6/6 [==============================] - 0s 245us/sample - loss: 6.3
855
Epoch 2396/4000
6/6 [==============================] - 0s 253us/sample - loss: 6.3
625
Epoch 2397/4000
6/6 [==============================] - 0s 228us/sample - loss: 6.3
236
Epoch 2398/4000
6/6 [==============================] - 0s 246us/sample - loss: 6.2
502
Epoch 2399/4000
6/6 [==============================] - 0s 288us/sample - loss: 6.2
426
Epoch 2400/4000
6/6 [==============================] - 0s 230us/sample - loss: 6.1
910
Epoch 2401/4000
6/6 [==============================] - 0s 271us/sample - loss: 6.1
340
```

```
Epoch 2402/4000
6/6 [==============================] - 0s 227us/sample - loss: 6.1
008
Epoch 2403/4000
6/6 [==============================] - 0s 224us/sample - loss: 6.0
392
Epoch 2404/4000
6/6 [==============================] - 0s 209us/sample - loss: 6.0
113
Epoch 2405/4000
6/6 [==============================] - 0s 197us/sample - loss: 5.9
786
Epoch 2406/4000
6/6 [==============================] - 0s 219us/sample - loss: 5.9
096
Epoch 2407/4000
6/6 [==============================] - 0s 264us/sample - loss: 5.8
722
Epoch 2408/4000
6/6 [==============================] - 0s 227us/sample - loss: 5.8
648
Epoch 2409/4000
6/6 [==============================] - 0s 302us/sample - loss: 5.7
940
Epoch 2410/4000
6/6 [==============================] - 0s 284us/sample - loss: 5.7
570
Epoch 2411/4000
6/6 [==============================] - 0s 226us/sample - loss: 5.7
123
Epoch 2412/4000
6/6 [==============================] - 0s 261us/sample - loss: 5.6
755
Epoch 2413/4000
6/6 [==============================] - 0s 234us/sample - loss: 5.6
451
Epoch 2414/4000
6/6 [==============================] - 0s 256us/sample - loss: 5.5
875
Epoch 2415/4000
6/6 [==============================] - 0s 197us/sample - loss: 5.5
653
Epoch 2416/4000
6/6 [==============================] - 0s 247us/sample - loss: 5.5
291
Epoch 2417/4000
6/6 [==============================] - 0s 208us/sample - loss: 5.4
851
Epoch 2418/4000
6/6 [==============================] - 0s 14ms/sample - loss: 5.43
91
Epoch 2419/4000
6/6 [==============================] - 0s 269us/sample - loss: 5.3
906
Epoch 2420/4000
6/6 [==============================] - 0s 213us/sample - loss: 5.3
594
```

```
Epoch 2421/4000
6/6 [==============================] - 0s 234us/sample - loss: 5.3
283
Epoch 2422/4000
6/6 [==============================] - 0s 252us/sample - loss: 5.2
737
Epoch 2423/4000
6/6 [==============================] - 0s 272us/sample - loss: 5.2
528
Epoch 2424/4000
6/6 [==============================] - 0s 200us/sample - loss: 5.2
269
Epoch 2425/4000
6/6 [==============================] - 0s 204us/sample - loss: 5.1
488
Epoch 2426/4000
6/6 [==============================] - 0s 201us/sample - loss: 5.1
319
Epoch 2427/4000
6/6 [==============================] - 0s 236us/sample - loss: 5.0
754
Epoch 2428/4000
6/6 [==============================] - 0s 215us/sample - loss: 5.0
408
Epoch 2429/4000
6/6 [==============================] - 0s 320us/sample - loss: 5.0
246
Epoch 2430/4000
6/6 [==============================] - 0s 247us/sample - loss: 4.9
478
Epoch 2431/4000
6/6 [==============================] - 0s 271us/sample - loss: 4.9
224
Epoch 2432/4000
6/6 [==============================] - 0s 293us/sample - loss: 4.9
023
Epoch 2433/4000
6/6 [==============================] - 0s 213us/sample - loss: 4.8
498
Epoch 2434/4000
6/6 [==============================] - 0s 268us/sample - loss: 4.8
082
Epoch 2435/4000
6/6 [==============================] - 0s 222us/sample - loss: 4.7
762
Epoch 2436/4000
6/6 [==============================] - 0s 279us/sample - loss: 4.7
470
Epoch 2437/4000
6/6 [==============================] - 0s 253us/sample - loss: 4.7
135
Epoch 2438/4000
6/6 [==============================] - 0s 14ms/sample - loss: 4.65
01
Epoch 2439/4000
6/6 [==============================] - 0s 293us/sample - loss: 4.6
259
```

```
Epoch 2440/4000
6/6 [==============================] - 0s 269us/sample - loss: 4.6
099
Epoch 2441/4000
6/6 [==============================] - 0s 247us/sample - loss: 4.5
784
Epoch 2442/4000
6/6 [==============================] - 0s 240us/sample - loss: 4.5
380
Epoch 2443/4000
6/6 [==============================] - 0s 191us/sample - loss: 4.4
966
Epoch 2444/4000
6/6 [==============================] - 0s 237us/sample - loss: 4.4
774
Epoch 2445/4000
6/6 [==============================] - 0s 201us/sample - loss: 4.4
474
Epoch 2446/4000
6/6 [==============================] - 0s 201us/sample - loss: 4.4
246
Epoch 2447/4000
6/6 [==============================] - 0s 239us/sample - loss: 4.3
722
Epoch 2448/4000
6/6 [==============================] - 0s 14ms/sample - loss: 4.35
84
Epoch 2449/4000
6/6 [==============================] - 0s 255us/sample - loss: 4.3
289
Epoch 2450/4000
6/6 [==============================] - 0s 222us/sample - loss: 4.3
064
Epoch 2451/4000
6/6 [==============================] - 0s 214us/sample - loss: 4.2
662
Epoch 2452/4000
6/6 [==============================] - 0s 244us/sample - loss: 4.2
474
Epoch 2453/4000
6/6 [==============================] - 0s 197us/sample - loss: 4.2
184
Epoch 2454/4000
6/6 [==============================] - 0s 261us/sample - loss: 4.1
960
Epoch 2455/4000
6/6 [==============================] - 0s 193us/sample - loss: 4.1
452
Epoch 2456/4000
6/6 [==============================] - 0s 189us/sample - loss: 4.1
316
Epoch 2457/4000
6/6 [==============================] - 0s 213us/sample - loss: 4.1
030
Epoch 2458/4000
6/6 [==============================] - 0s 194us/sample - loss: 4.0
809
```

```
Epoch 2459/4000
6/6 [==============================] - 0s 189us/sample - loss: 4.0
419
Epoch 2460/4000
6/6 [==============================] - 0s 244us/sample - loss: 4.0
236
Epoch 2461/4000
6/6 [==============================] - 0s 222us/sample - loss: 3.9
955
Epoch 2462/4000
6/6 [==============================] - 0s 213us/sample - loss: 3.9
737
Epoch 2463/4000
6/6 [==============================] - 0s 236us/sample - loss: 3.9
243
Epoch 2464/4000
6/6 [==============================] - 0s 244us/sample - loss: 3.9
108
Epoch 2465/4000
6/6 [==============================] - 0s 219us/sample - loss: 3.8
831
Epoch 2466/4000
6/6 [==============================] - 0s 227us/sample - loss: 3.8
617
Epoch 2467/4000
6/6 [==============================] - 0s 253us/sample - loss: 3.8
238
Epoch 2468/4000
6/6 [==============================] - 0s 205us/sample - loss: 3.8
060
Epoch 2469/4000
6/6 [==============================] - 0s 207us/sample - loss: 3.7
787
Epoch 2470/4000
6/6 [==============================] - 0s 273us/sample - loss: 3.7
576
Epoch 2471/4000
6/6 [==============================] - 0s 252us/sample - loss: 3.7
096
Epoch 2472/4000
6/6 [==============================] - 0s 228us/sample - loss: 3.7
009
Epoch 2473/4000
6/6 [==============================] - 0s 235us/sample - loss: 3.6
636
Epoch 2474/4000
6/6 [==============================] - 0s 232us/sample - loss: 3.6
428
Epoch 2475/4000
6/6 [==============================] - 0s 229us/sample - loss: 3.6
161
Epoch 2476/4000
6/6 [==============================] - 0s 198us/sample - loss: 3.6
034
Epoch 2477/4000
6/6 [==============================] - 0s 190us/sample - loss: 3.5
561
```

```
Epoch 2478/4000
6/6 [==============================] - 0s 14ms/sample - loss: 3.53
56
Epoch 2479/4000
6/6 [==============================] - 0s 242us/sample - loss: 3.5
093
Epoch 2480/4000
6/6 [==============================] - 0s 225us/sample - loss: 3.4
922
Epoch 2481/4000
6/6 [==============================] - 0s 202us/sample - loss: 3.4
561
Epoch 2482/4000
6/6 [==============================] - 0s 229us/sample - loss: 3.4
359
Epoch 2483/4000
6/6 [==============================] - 0s 215us/sample - loss: 3.4
100
Epoch 2484/4000
6/6 [==============================] - 0s 270us/sample - loss: 3.3
975
Epoch 2485/4000
6/6 [==============================] - 0s 235us/sample - loss: 3.3
516
Epoch 2486/4000
6/6 [==============================] - 0s 226us/sample - loss: 3.3
317
Epoch 2487/4000
6/6 [==============================] - 0s 209us/sample - loss: 3.3
063
Epoch 2488/4000
6/6 [==============================] - 0s 209us/sample - loss: 3.2
898
Epoch 2489/4000
6/6 [==============================] - 0s 281us/sample - loss: 3.2
548
Epoch 2490/4000
6/6 [==============================] - 0s 233us/sample - loss: 3.2
351
Epoch 2491/4000
6/6 [==============================] - 0s 238us/sample - loss: 3.2
102
Epoch 2492/4000
6/6 [==============================] - 0s 229us/sample - loss: 3.1
934
Epoch 2493/4000
6/6 [==============================] - 0s 229us/sample - loss: 3.1
589
Epoch 2494/4000
6/6 [==============================] - 0s 229us/sample - loss: 3.1
427
Epoch 2495/4000
6/6 [==============================] - 0s 250us/sample - loss: 3.1
179
Epoch 2496/4000
6/6 [==============================] - 0s 231us/sample - loss: 3.0
987
```

```
Epoch 2497/4000
6/6 [==============================] - 0s 216us/sample - loss: 3.0
552
Epoch 2498/4000
6/6 [==============================] - 0s 14ms/sample - loss: 3.04
74
Epoch 2499/4000
6/6 [==============================] - 0s 251us/sample - loss: 3.0
135
Epoch 2500/4000
6/6 [==============================] - 0s 234us/sample - loss: 2.9
947
Epoch 2501/4000
6/6 [==============================] - 0s 270us/sample - loss: 2.9
704
Epoch 2502/4000
6/6 [==============================] - 0s 205us/sample - loss: 2.9
590
Epoch 2503/4000
6/6 [==============================] - 0s 236us/sample - loss: 2.9
161
Epoch 2504/4000
6/6 [==============================] - 0s 204us/sample - loss: 2.8
976
Epoch 2505/4000
6/6 [==============================] - 0s 207us/sample - loss: 2.8
737
Epoch 2506/4000
6/6 [==============================] - 0s 196us/sample - loss: 2.8
583
Epoch 2507/4000
6/6 [==============================] - 0s 184us/sample - loss: 2.8
256
Epoch 2508/4000
6/6 [==============================] - 0s 229us/sample - loss: 2.8
073
Epoch 2509/4000
6/6 [==============================] - 0s 265us/sample - loss: 2.7
839
Epoch 2510/4000
6/6 [==============================] - 0s 243us/sample - loss: 2.7
726
Epoch 2511/4000
6/6 [==============================] - 0s 202us/sample - loss: 2.7
312
Epoch 2512/4000
6/6 [==============================] - 0s 289us/sample - loss: 2.7
132
Epoch 2513/4000
6/6 [==============================] - 0s 242us/sample - loss: 2.6
903
Epoch 2514/4000
6/6 [==============================] - 0s 243us/sample - loss: 2.6
753
Epoch 2515/4000
6/6 [==============================] - 0s 213us/sample - loss: 2.6
438
```

```
Epoch 2516/4000
6/6 [==============================] - 0s 226us/sample - loss: 2.6
261
Epoch 2517/4000
6/6 [==============================] - 0s 229us/sample - loss: 2.6
036
Epoch 2518/4000
6/6 [==============================] - 0s 14ms/sample - loss: 2.58
86
Epoch 2519/4000
6/6 [==============================] - 0s 284us/sample - loss: 2.5
676
Epoch 2520/4000
6/6 [==============================] - 0s 241us/sample - loss: 2.5
424
Epoch 2521/4000
6/6 [==============================] - 0s 231us/sample - loss: 2.5
278
Epoch 2522/4000
6/6 [==============================] - 0s 231us/sample - loss: 2.5
130
Epoch 2523/4000
6/6 [==============================] - 0s 208us/sample - loss: 2.5
033
Epoch 2524/4000
6/6 [==============================] - 0s 211us/sample - loss: 2.4
813
Epoch 2525/4000
6/6 [==============================] - 0s 220us/sample - loss: 2.4
573
Epoch 2526/4000
6/6 [==============================] - 0s 235us/sample - loss: 2.4
535
Epoch 2527/4000
6/6 [==============================] - 0s 225us/sample - loss: 2.4
443
Epoch 2528/4000
6/6 [==============================] - 0s 290us/sample - loss: 2.4
095
Epoch 2529/4000
6/6 [==============================] - 0s 234us/sample - loss: 2.4
063
Epoch 2530/4000
6/6 [==============================] - 0s 210us/sample - loss: 2.3
846
Epoch 2531/4000
6/6 [==============================] - 0s 285us/sample - loss: 2.3
776
Epoch 2532/4000
6/6 [==============================] - 0s 194us/sample - loss: 2.3
561
Epoch 2533/4000
6/6 [==============================] - 0s 232us/sample - loss: 2.3
257
Epoch 2534/4000
6/6 [==============================] - 0s 232us/sample - loss: 2.3
324
```

```
Epoch 2535/4000
6/6 [==============================] - 0s 201us/sample - loss: 2.3
082
Epoch 2536/4000
6/6 [==============================] - 0s 199us/sample - loss: 2.2
953
Epoch 2537/4000
6/6 [==============================] - 0s 14ms/sample - loss: 2.28
30
Epoch 2538/4000
6/6 [==============================] - 0s 267us/sample - loss: 2.2
632
Epoch 2539/4000
6/6 [==============================] - 0s 216us/sample - loss: 2.2
597
Epoch 2540/4000
6/6 [==============================] - 0s 234us/sample - loss: 2.2
224
Epoch 2541/4000
6/6 [==============================] - 0s 232us/sample - loss: 2.2
114
Epoch 2542/4000
6/6 [==============================] - 0s 204us/sample - loss: 2.2
113
Epoch 2543/4000
6/6 [==============================] - 0s 255us/sample - loss: 2.1
874
Epoch 2544/4000
6/6 [==============================] - 0s 226us/sample - loss: 2.1
668
Epoch 2545/4000
6/6 [==============================] - 0s 210us/sample - loss: 2.1
515
Epoch 2546/4000
6/6 [==============================] - 0s 227us/sample - loss: 2.1
377
Epoch 2547/4000
6/6 [==============================] - 0s 217us/sample - loss: 2.1
308
Epoch 2548/4000
6/6 [==============================] - 0s 249us/sample - loss: 2.1
199
Epoch 2549/4000
6/6 [==============================] - 0s 230us/sample - loss: 2.0
911
Epoch 2550/4000
6/6 [==============================] - 0s 217us/sample - loss: 2.0
805
Epoch 2551/4000
6/6 [==============================] - 0s 220us/sample - loss: 2.0
616
Epoch 2552/4000
6/6 [==============================] - 0s 196us/sample - loss: 2.0
614
Epoch 2553/4000
6/6 [==============================] - 0s 218us/sample - loss: 2.0
415
```

```
Epoch 2554/4000
6/6 [==============================] - 0s 194us/sample - loss: 2.0
151
Epoch 2555/4000
6/6 [==============================] - 0s 239us/sample - loss: 2.0
213
Epoch 2556/4000
6/6 [==============================] - 0s 237us/sample - loss: 1.9
932
Epoch 2557/4000
6/6 [==============================] - 0s 238us/sample - loss: 1.9
736
Epoch 2558/4000
6/6 [==============================] - 0s 13ms/sample - loss: 1.97
14
Epoch 2559/4000
6/6 [==============================] - 0s 258us/sample - loss: 1.9
455
Epoch 2560/4000
6/6 [==============================] - 0s 300us/sample - loss: 1.9
299
Epoch 2561/4000
6/6 [==============================] - 0s 227us/sample - loss: 1.9
262
Epoch 2562/4000
6/6 [==============================] - 0s 224us/sample - loss: 1.9
078
Epoch 2563/4000
6/6 [==============================] - 0s 231us/sample - loss: 1.8
977
Epoch 2564/4000
6/6 [==============================] - 0s 245us/sample - loss: 1.8
812
Epoch 2565/4000
6/6 [==============================] - 0s 197us/sample - loss: 1.8
603
Epoch 2566/4000
6/6 [==============================] - 0s 192us/sample - loss: 1.8
538
Epoch 2567/4000
6/6 [==============================] - 0s 197us/sample - loss: 1.8
410
Epoch 2568/4000
6/6 [==============================] - 0s 14ms/sample - loss: 1.82
70
Epoch 2569/4000
6/6 [==============================] - 0s 299us/sample - loss: 1.8
080
Epoch 2570/4000
6/6 [==============================] - 0s 238us/sample - loss: 1.7
868
Epoch 2571/4000
6/6 [==============================] - 0s 228us/sample - loss: 1.7
866
Epoch 2572/4000
6/6 [==============================] - 0s 221us/sample - loss: 1.7
764
```

```
Epoch 2573/4000
6/6 [==============================] - 0s 212us/sample - loss: 1.7
434
Epoch 2574/4000
6/6 [==============================] - 0s 202us/sample - loss: 1.7
406
Epoch 2575/4000
6/6 [==============================] - 0s 237us/sample - loss: 1.7
231
Epoch 2576/4000
6/6 [==============================] - 0s 269us/sample - loss: 1.7
124
Epoch 2577/4000
6/6 [==============================] - 0s 204us/sample - loss: 1.7
014
Epoch 2578/4000
6/6 [==============================] - 0s 14ms/sample - loss: 1.68
07
Epoch 2579/4000
6/6 [==============================] - 0s 264us/sample - loss: 1.6
864
Epoch 2580/4000
6/6 [==============================] - 0s 228us/sample - loss: 1.6
542
Epoch 2581/4000
6/6 [==============================] - 0s 229us/sample - loss: 1.6
428
Epoch 2582/4000
6/6 [==============================] - 0s 223us/sample - loss: 1.6
369
Epoch 2583/4000
6/6 [==============================] - 0s 209us/sample - loss: 1.6
190
Epoch 2584/4000
6/6 [==============================] - 0s 207us/sample - loss: 1.6
169
Epoch 2585/4000
6/6 [==============================] - 0s 206us/sample - loss: 1.5
881
Epoch 2586/4000
6/6 [==============================] - 0s 204us/sample - loss: 1.5
808
Epoch 2587/4000
6/6 [==============================] - 0s 213us/sample - loss: 1.5
738
Epoch 2588/4000
6/6 [==============================] - 0s 255us/sample - loss: 1.5
586
Epoch 2589/4000
6/6 [==============================] - 0s 303us/sample - loss: 1.5
411
Epoch 2590/4000
6/6 [==============================] - 0s 222us/sample - loss: 1.5
276
Epoch 2591/4000
6/6 [==============================] - 0s 215us/sample - loss: 1.5
159
```

```
Epoch 2592/4000
6/6 [==============================] - 0s 209us/sample - loss: 1.5
108
Epoch 2593/4000
6/6 [==============================] - 0s 214us/sample - loss: 1.4
915
Epoch 2594/4000
6/6 [==============================] - 0s 232us/sample - loss: 1.4
727
Epoch 2595/4000
6/6 [==============================] - 0s 198us/sample - loss: 1.4
729
Epoch 2596/4000
6/6 [==============================] - 0s 229us/sample - loss: 1.4
636
Epoch 2597/4000
6/6 [==============================] - 0s 256us/sample - loss: 1.4
335
Epoch 2598/4000
6/6 [==============================] - 0s 276us/sample - loss: 1.4
344
Epoch 2599/4000
6/6 [==============================] - 0s 261us/sample - loss: 1.4
189
Epoch 2600/4000
6/6 [==============================] - 0s 210us/sample - loss: 1.4
124
Epoch 2601/4000
6/6 [==============================] - 0s 209us/sample - loss: 1.4
006
Epoch 2602/4000
6/6 [==============================] - 0s 206us/sample - loss: 1.3
893
Epoch 2603/4000
6/6 [==============================] - 0s 223us/sample - loss: 1.3
660
Epoch 2604/4000
6/6 [==============================] - 0s 242us/sample - loss: 1.3
607
Epoch 2605/4000
6/6 [==============================] - 0s 196us/sample - loss: 1.3
497
Epoch 2606/4000
6/6 [==============================] - 0s 251us/sample - loss: 1.3
428
Epoch 2607/4000
6/6 [==============================] - 0s 205us/sample - loss: 1.3
344
Epoch 2608/4000
6/6 [==============================] - 0s 259us/sample - loss: 1.3
276
Epoch 2609/4000
6/6 [==============================] - 0s 245us/sample - loss: 1.3
048
Epoch 2610/4000
6/6 [==============================] - 0s 237us/sample - loss: 1.3
157
```

```
Epoch 2611/4000
6/6 [==============================] - 0s 237us/sample - loss: 1.2
996
Epoch 2612/4000
6/6 [==============================] - 0s 204us/sample - loss: 1.2
872
Epoch 2613/4000
6/6 [==============================] - 0s 218us/sample - loss: 1.2
788
Epoch 2614/4000
6/6 [==============================] - 0s 201us/sample - loss: 1.2
838
Epoch 2615/4000
6/6 [==============================] - 0s 234us/sample - loss: 1.2
685
Epoch 2616/4000
6/6 [==============================] - 0s 214us/sample - loss: 1.2
606
Epoch 2617/4000
6/6 [==============================] - 0s 265us/sample - loss: 1.2
406
Epoch 2618/4000
6/6 [==============================] - 0s 261us/sample - loss: 1.2
555
Epoch 2619/4000
6/6 [==============================] - 0s 219us/sample - loss: 1.2
355
Epoch 2620/4000
6/6 [==============================] - 0s 225us/sample - loss: 1.2
278
Epoch 2621/4000
6/6 [==============================] - 0s 193us/sample - loss: 1.2
179
Epoch 2622/4000
6/6 [==============================] - 0s 188us/sample - loss: 1.2
177
Epoch 2623/4000
6/6 [==============================] - 0s 228us/sample - loss: 1.2
094
Epoch 2624/4000
6/6 [==============================] - 0s 246us/sample - loss: 1.1
974
Epoch 2625/4000
6/6 [==============================] - 0s 196us/sample - loss: 1.1
877
Epoch 2626/4000
6/6 [==============================] - 0s 278us/sample - loss: 1.1
925
Epoch 2627/4000
6/6 [==============================] - 0s 238us/sample - loss: 1.1
710
Epoch 2628/4000
6/6 [==============================] - 0s 214us/sample - loss: 1.1
654
Epoch 2629/4000
6/6 [==============================] - 0s 242us/sample - loss: 1.1
558
```

```
Epoch 2630/4000
6/6 [==============================] - 0s 193us/sample - loss: 1.1
588
Epoch 2631/4000
6/6 [==============================] - 0s 201us/sample - loss: 1.1
506
Epoch 2632/4000
6/6 [==============================] - 0s 224us/sample - loss: 1.1
401
Epoch 2633/4000
6/6 [==============================] - 0s 270us/sample - loss: 1.1
306
Epoch 2634/4000
6/6 [==============================] - 0s 226us/sample - loss: 1.1
353
Epoch 2635/4000
6/6 [==============================] - 0s 214us/sample - loss: 1.1
143
Epoch 2636/4000
6/6 [==============================] - 0s 13ms/sample - loss: 1.10
90
Epoch 2637/4000
6/6 [==============================] - 0s 280us/sample - loss: 1.0
995
Epoch 2638/4000
6/6 [==============================] - 0s 228us/sample - loss: 1.0
981
Epoch 2639/4000
6/6 [==============================] - 0s 207us/sample - loss: 1.0
881
Epoch 2640/4000
6/6 [==============================] - 0s 237us/sample - loss: 1.0
787
Epoch 2641/4000
6/6 [==============================] - 0s 222us/sample - loss: 1.0
676
Epoch 2642/4000
6/6 [==============================] - 0s 233us/sample - loss: 1.0
736
Epoch 2643/4000
6/6 [==============================] - 0s 200us/sample - loss: 1.0
549
Epoch 2644/4000
6/6 [==============================] - 0s 254us/sample - loss: 1.0
590
Epoch 2645/4000
6/6 [==============================] - 0s 227us/sample - loss: 1.0
407
Epoch 2646/4000
6/6 [==============================] - 0s 14ms/sample - loss: 1.04
32
Epoch 2647/4000
6/6 [==============================] - 0s 254us/sample - loss: 1.0
355
Epoch 2648/4000
6/6 [==============================] - 0s 215us/sample - loss: 1.0
263
```

```
Epoch 2649/4000
6/6 [==============================] - 0s 215us/sample - loss: 1.0
156
Epoch 2650/4000
6/6 [==============================] - 0s 284us/sample - loss: 1.0
153
Epoch 2651/4000
6/6 [==============================] - 0s 243us/sample - loss: 1.0
011
Epoch 2652/4000
6/6 [==============================] - 0s 222us/sample - loss: 1.0
011
Epoch 2653/4000
6/6 [==============================] - 0s 218us/sample - loss: 0.9
814
Epoch 2654/4000
6/6 [==============================] - 0s 192us/sample - loss: 0.9
858
Epoch 2655/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.97
69
Epoch 2656/4000
6/6 [==============================] - 0s 245us/sample - loss: 0.9
675
Epoch 2657/4000
6/6 [==============================] - 0s 234us/sample - loss: 0.9
569
Epoch 2658/4000
6/6 [==============================] - 0s 230us/sample - loss: 0.9
614
Epoch 2659/4000
6/6 [==============================] - 0s 283us/sample - loss: 0.9
539
Epoch 2660/4000
6/6 [==============================] - 0s 202us/sample - loss: 0.9
488
Epoch 2661/4000
6/6 [==============================] - 0s 205us/sample - loss: 0.9
296
Epoch 2662/4000
6/6 [==============================] - 0s 204us/sample - loss: 0.9
389
Epoch 2663/4000
6/6 [==============================] - 0s 215us/sample - loss: 0.9
252
Epoch 2664/4000
6/6 [==============================] - 0s 266us/sample - loss: 0.9
148
Epoch 2665/4000
6/6 [==============================] - 0s 260us/sample - loss: 0.9
077
Epoch 2666/4000
6/6 [==============================] - 0s 13ms/sample - loss: 0.91
20
Epoch 2667/4000
6/6 [==============================] - 0s 249us/sample - loss: 0.8
990
```

```
Epoch 2668/4000
6/6 [==============================] - 0s 244us/sample - loss: 0.8
925
Epoch 2669/4000
6/6 [==============================] - 0s 257us/sample - loss: 0.8
755
Epoch 2670/4000
6/6 [==============================] - 0s 231us/sample - loss: 0.8
882
Epoch 2671/4000
6/6 [==============================] - 0s 251us/sample - loss: 0.8
712
Epoch 2672/4000
6/6 [==============================] - 0s 195us/sample - loss: 0.8
648
Epoch 2673/4000
6/6 [==============================] - 0s 233us/sample - loss: 0.8
566
Epoch 2674/4000
6/6 [==============================] - 0s 217us/sample - loss: 0.8
564
Epoch 2675/4000
6/6 [==============================] - 0s 204us/sample - loss: 0.8
494
Epoch 2676/4000
6/6 [==============================] - 0s 213us/sample - loss: 0.8
394
Epoch 2677/4000
6/6 [==============================] - 0s 13ms/sample - loss: 0.83
13
Epoch 2678/4000
6/6 [==============================] - 0s 233us/sample - loss: 0.8
352
Epoch 2679/4000
6/6 [==============================] - 0s 237us/sample - loss: 0.8
173
Epoch 2680/4000
6/6 [==============================] - 0s 230us/sample - loss: 0.8
126
Epoch 2681/4000
6/6 [==============================] - 0s 217us/sample - loss: 0.8
046
Epoch 2682/4000
6/6 [==============================] - 0s 211us/sample - loss: 0.8
072
Epoch 2683/4000
6/6 [==============================] - 0s 207us/sample - loss: 0.8
003
Epoch 2684/4000
6/6 [==============================] - 0s 208us/sample - loss: 0.7
915
Epoch 2685/4000
6/6 [==============================] - 0s 222us/sample - loss: 0.7
836
Epoch 2686/4000
6/6 [==============================] - 0s 242us/sample - loss: 0.7
874
```

```
Epoch 2687/4000
6/6 [==============================] - 0s 217us/sample - loss: 0.7
700
Epoch 2688/4000
6/6 [==============================] - 0s 252us/sample - loss: 0.7
655
Epoch 2689/4000
6/6 [==============================] - 0s 238us/sample - loss: 0.7
577
Epoch 2690/4000
6/6 [==============================] - 0s 213us/sample - loss: 0.7
566
Epoch 2691/4000
6/6 [==============================] - 0s 250us/sample - loss: 0.7
483
Epoch 2692/4000
6/6 [==============================] - 0s 188us/sample - loss: 0.7
404
Epoch 2693/4000
6/6 [==============================] - 0s 187us/sample - loss: 0.7
314
Epoch 2694/4000
6/6 [==============================] - 0s 193us/sample - loss: 0.7
364
Epoch 2695/4000
6/6 [==============================] - 0s 215us/sample - loss: 0.7
208
Epoch 2696/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.72
42
Epoch 2697/4000
6/6 [==============================] - 0s 280us/sample - loss: 0.7
090
Epoch 2698/4000
6/6 [==============================] - 0s 209us/sample - loss: 0.7
112
Epoch 2699/4000
6/6 [==============================] - 0s 247us/sample - loss: 0.7
048
Epoch 2700/4000
6/6 [==============================] - 0s 224us/sample - loss: 0.6
972
Epoch 2701/4000
6/6 [==============================] - 0s 226us/sample - loss: 0.6
884
Epoch 2702/4000
6/6 [==============================] - 0s 249us/sample - loss: 0.6
882
Epoch 2703/4000
6/6 [==============================] - 0s 204us/sample - loss: 0.6
764
Epoch 2704/4000
6/6 [==============================] - 0s 206us/sample - loss: 0.6
764
Epoch 2705/4000
6/6 [==============================] - 0s 196us/sample - loss: 0.6
603
```

```
Epoch 2706/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.66
38
Epoch 2707/4000
6/6 [==============================] - 0s 243us/sample - loss: 0.6
566
Epoch 2708/4000
6/6 [==============================] - 0s 241us/sample - loss: 0.6
488
Epoch 2709/4000
6/6 [==============================] - 0s 204us/sample - loss: 0.6
402
Epoch 2710/4000
6/6 [==============================] - 0s 230us/sample - loss: 0.6
440
Epoch 2711/4000
6/6 [==============================] - 0s 198us/sample - loss: 0.6
378
Epoch 2712/4000
6/6 [==============================] - 0s 255us/sample - loss: 0.6
335
Epoch 2713/4000
6/6 [==============================] - 0s 195us/sample - loss: 0.6
179
Epoch 2714/4000
6/6 [==============================] - 0s 205us/sample - loss: 0.6
256
Epoch 2715/4000
6/6 [==============================] - 0s 213us/sample - loss: 0.6
143
Epoch 2716/4000
6/6 [==============================] - 0s 185us/sample - loss: 0.6
059
Epoch 2717/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.60
01
Epoch 2718/4000
6/6 [==============================] - 0s 238us/sample - loss: 0.6
038
Epoch 2719/4000
6/6 [==============================] - 0s 210us/sample - loss: 0.5
930
Epoch 2720/4000
6/6 [==============================] - 0s 234us/sample - loss: 0.5
878
Epoch 2721/4000
6/6 [==============================] - 0s 208us/sample - loss: 0.5
739
Epoch 2722/4000
6/6 [==============================] - 0s 186us/sample - loss: 0.5
843
Epoch 2723/4000
6/6 [==============================] - 0s 286us/sample - loss: 0.5
704
Epoch 2724/4000
6/6 [==============================] - 0s 237us/sample - loss: 0.5
653
```

```
Epoch 2725/4000
6/6 [==============================] - 0s 238us/sample - loss: 0.5
588
Epoch 2726/4000
6/6 [==============================] - 0s 232us/sample - loss: 0.5
586
Epoch 2727/4000
6/6 [==============================] - 0s 233us/sample - loss: 0.5
528
Epoch 2728/4000
6/6 [==============================] - 0s 260us/sample - loss: 0.5
448
Epoch 2729/4000
6/6 [==============================] - 0s 246us/sample - loss: 0.5
383
Epoch 2730/4000
6/6 [==============================] - 0s 217us/sample - loss: 0.5
414
Epoch 2731/4000
6/6 [==============================] - 0s 208us/sample - loss: 0.5
271
Epoch 2732/4000
6/6 [==============================] - 0s 209us/sample - loss: 0.5
232
Epoch 2733/4000
6/6 [==============================] - 0s 227us/sample - loss: 0.5
227
Epoch 2734/4000
6/6 [==============================] - 0s 208us/sample - loss: 0.5
236
Epoch 2735/4000
6/6 [==============================] - 0s 197us/sample - loss: 0.5
211
Epoch 2736/4000
6/6 [==============================] - 0s 227us/sample - loss: 0.5
145
Epoch 2737/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.51
13
Epoch 2738/4000
6/6 [==============================] - 0s 261us/sample - loss: 0.5
001
Epoch 2739/4000
6/6 [==============================] - 0s 230us/sample - loss: 0.4
937
Epoch 2740/4000
6/6 [==============================] - 0s 206us/sample - loss: 0.5
031
Epoch 2741/4000
6/6 [==============================] - 0s 278us/sample - loss: 0.4
924
Epoch 2742/4000
6/6 [==============================] - 0s 227us/sample - loss: 0.4
904
Epoch 2743/4000
6/6 [==============================] - 0s 249us/sample - loss: 0.4
856
```

```
Epoch 2744/4000
6/6 [==============================] - 0s 196us/sample - loss: 0.4
826
Epoch 2745/4000
6/6 [==============================] - 0s 242us/sample - loss: 0.4
794
Epoch 2746/4000
6/6 [==============================] - 0s 192us/sample - loss: 0.4
763
Epoch 2747/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.47
86
Epoch 2748/4000
6/6 [==============================] - 0s 257us/sample - loss: 0.4
763
Epoch 2749/4000
6/6 [==============================] - 0s 211us/sample - loss: 0.4
719
Epoch 2750/4000
6/6 [==============================] - 0s 224us/sample - loss: 0.4
688
Epoch 2751/4000
6/6 [==============================] - 0s 224us/sample - loss: 0.4
657
Epoch 2752/4000
6/6 [==============================] - 0s 240us/sample - loss: 0.4
614
Epoch 2753/4000
6/6 [==============================] - 0s 273us/sample - loss: 0.4
586
Epoch 2754/4000
6/6 [==============================] - 0s 251us/sample - loss: 0.4
563
Epoch 2755/4000
6/6 [==============================] - 0s 191us/sample - loss: 0.4
626
Epoch 2756/4000
6/6 [==============================] - 0s 230us/sample - loss: 0.4
556
Epoch 2757/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.45
01
Epoch 2758/4000
6/6 [==============================] - 0s 230us/sample - loss: 0.4
501
Epoch 2759/4000
6/6 [==============================] - 0s 244us/sample - loss: 0.4
529
Epoch 2760/4000
6/6 [==============================] - 0s 215us/sample - loss: 0.4
462
Epoch 2761/4000
6/6 [==============================] - 0s 222us/sample - loss: 0.4
407
Epoch 2762/4000
6/6 [==============================] - 0s 214us/sample - loss: 0.4
441
```

```
Epoch 2763/4000
6/6 [==============================] - 0s 227us/sample - loss: 0.4
426
Epoch 2764/4000
6/6 [==============================] - 0s 227us/sample - loss: 0.4
417
Epoch 2765/4000
6/6 [==============================] - 0s 237us/sample - loss: 0.4
375
Epoch 2766/4000
6/6 [==============================] - 0s 205us/sample - loss: 0.4
345
Epoch 2767/4000
6/6 [==============================] - 0s 206us/sample - loss: 0.4
316
Epoch 2768/4000
6/6 [==============================] - 0s 209us/sample - loss: 0.4
274
Epoch 2769/4000
6/6 [==============================] - 0s 260us/sample - loss: 0.4
252
Epoch 2770/4000
6/6 [==============================] - 0s 228us/sample - loss: 0.4
274
Epoch 2771/4000
6/6 [==============================] - 0s 198us/sample - loss: 0.4
281
Epoch 2772/4000
6/6 [==============================] - 0s 212us/sample - loss: 0.4
181
Epoch 2773/4000
6/6 [==============================] - 0s 225us/sample - loss: 0.4
152
Epoch 2774/4000
6/6 [==============================] - 0s 255us/sample - loss: 0.4
152
Epoch 2775/4000
6/6 [==============================] - 0s 243us/sample - loss: 0.4
152
Epoch 2776/4000
6/6 [==============================] - 0s 267us/sample - loss: 0.4
123
Epoch 2777/4000
6/6 [==============================] - 0s 279us/sample - loss: 0.4
027
Epoch 2778/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.40
34
Epoch 2779/4000
6/6 [==============================] - 0s 290us/sample - loss: 0.4
054
Epoch 2780/4000
6/6 [==============================] - 0s 263us/sample - loss: 0.4
054
Epoch 2781/4000
6/6 [==============================] - 0s 266us/sample - loss: 0.3
998
```

```
Epoch 2782/4000
6/6 [==============================] - 0s 246us/sample - loss: 0.3
965
Epoch 2783/4000
6/6 [==============================] - 0s 195us/sample - loss: 0.3
936
Epoch 2784/4000
6/6 [==============================] - 0s 211us/sample - loss: 0.3
896
Epoch 2785/4000
6/6 [==============================] - 0s 231us/sample - loss: 0.3
870
Epoch 2786/4000
6/6 [==============================] - 0s 243us/sample - loss: 0.3
841
Epoch 2787/4000
6/6 [==============================] - 0s 256us/sample - loss: 0.3
901
Epoch 2788/4000
6/6 [==============================] - 0s 311us/sample - loss: 0.3
856
Epoch 2789/4000
6/6 [==============================] - 0s 266us/sample - loss: 0.3
793
Epoch 2790/4000
6/6 [==============================] - 0s 258us/sample - loss: 0.3
818
Epoch 2791/4000
6/6 [==============================] - 0s 265us/sample - loss: 0.3
818
Epoch 2792/4000
6/6 [==============================] - 0s 207us/sample - loss: 0.3
768
Epoch 2793/4000
6/6 [==============================] - 0s 232us/sample - loss: 0.3
697
Epoch 2794/4000
6/6 [==============================] - 0s 203us/sample - loss: 0.3
697
Epoch 2795/4000
6/6 [==============================] - 0s 268us/sample - loss: 0.3
757
Epoch 2796/4000
6/6 [==============================] - 0s 210us/sample - loss: 0.3
702
Epoch 2797/4000
6/6 [==============================] - 0s 229us/sample - loss: 0.3
670
Epoch 2798/4000
6/6 [==============================] - 0s 207us/sample - loss: 0.3
604
Epoch 2799/4000
6/6 [==============================] - 0s 199us/sample - loss: 0.3
622
Epoch 2800/4000
6/6 [==============================] - 0s 363us/sample - loss: 0.3
584
```

```
Epoch 2801/4000
6/6 [==============================] - 0s 312us/sample - loss: 0.3
559
Epoch 2802/4000
6/6 [==============================] - 0s 234us/sample - loss: 0.3
556
Epoch 2803/4000
6/6 [==============================] - 0s 252us/sample - loss: 0.3
557
Epoch 2804/4000
6/6 [==============================] - 0s 202us/sample - loss: 0.3
530
Epoch 2805/4000
6/6 [==============================] - 0s 228us/sample - loss: 0.3
505
Epoch 2806/4000
6/6 [==============================] - 0s 210us/sample - loss: 0.3
529
Epoch 2807/4000
6/6 [==============================] - 0s 216us/sample - loss: 0.3
473
Epoch 2808/4000
6/6 [==============================] - 0s 268us/sample - loss: 0.3
447
Epoch 2809/4000
6/6 [==============================] - 0s 209us/sample - loss: 0.3
358
Epoch 2810/4000
6/6 [==============================] - 0s 256us/sample - loss: 0.3
439
Epoch 2811/4000
6/6 [==============================] - 0s 218us/sample - loss: 0.3
383
Epoch 2812/4000
6/6 [==============================] - 0s 288us/sample - loss: 0.3
383
Epoch 2813/4000
6/6 [==============================] - 0s 264us/sample - loss: 0.3
331
Epoch 2814/4000
6/6 [==============================] - 0s 242us/sample - loss: 0.3
293
Epoch 2815/4000
6/6 [==============================] - 0s 244us/sample - loss: 0.3
293
Epoch 2816/4000
6/6 [==============================] - 0s 207us/sample - loss: 0.3
270
Epoch 2817/4000
6/6 [==============================] - 0s 198us/sample - loss: 0.3
215
Epoch 2818/4000
6/6 [==============================] - 0s 247us/sample - loss: 0.3
214
Epoch 2819/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.32
42
```

```
Epoch 2820/4000
6/6 [==============================] - 0s 278us/sample - loss: 0.3
202
Epoch 2821/4000
6/6 [==============================] - 0s 218us/sample - loss: 0.3
197
Epoch 2822/4000
6/6 [==============================] - 0s 224us/sample - loss: 0.3
197
Epoch 2823/4000
6/6 [==============================] - 0s 262us/sample - loss: 0.3
136
Epoch 2824/4000
6/6 [==============================] - 0s 235us/sample - loss: 0.3
108
Epoch 2825/4000
6/6 [==============================] - 0s 262us/sample - loss: 0.3
057
Epoch 2826/4000
6/6 [==============================] - 0s 227us/sample - loss: 0.3
057
Epoch 2827/4000
6/6 [==============================] - 0s 210us/sample - loss: 0.3
111
Epoch 2828/4000
6/6 [==============================] - 0s 247us/sample - loss: 0.3
048
Epoch 2829/4000
6/6 [==============================] - 0s 211us/sample - loss: 0.3
032
Epoch 2830/4000
6/6 [==============================] - 0s 204us/sample - loss: 0.2
973
Epoch 2831/4000
6/6 [==============================] - 0s 243us/sample - loss: 0.2
973
Epoch 2832/4000
6/6 [==============================] - 0s 236us/sample - loss: 0.2
969
Epoch 2833/4000
6/6 [==============================] - 0s 211us/sample - loss: 0.2
925
Epoch 2834/4000
6/6 [==============================] - 0s 275us/sample - loss: 0.2
925
Epoch 2835/4000
6/6 [==============================] - 0s 236us/sample - loss: 0.2
958
Epoch 2836/4000
6/6 [==============================] - 0s 244us/sample - loss: 0.2
907
Epoch 2837/4000
6/6 [==============================] - 0s 290us/sample - loss: 0.2
883
Epoch 2838/4000
6/6 [==============================] - 0s 243us/sample - loss: 0.2
883
```

```
Epoch 2839/4000
6/6 [==============================] - 0s 209us/sample - loss: 0.2
846
Epoch 2840/4000
6/6 [==============================] - 0s 205us/sample - loss: 0.2
800
Epoch 2841/4000
6/6 [==============================] - 0s 378us/sample - loss: 0.2
751
Epoch 2842/4000
6/6 [==============================] - 0s 239us/sample - loss: 0.2
801
Epoch 2843/4000
6/6 [==============================] - 0s 245us/sample - loss: 0.2
822
Epoch 2844/4000
6/6 [==============================] - 0s 267us/sample - loss: 0.2
743
Epoch 2845/4000
6/6 [==============================] - 0s 210us/sample - loss: 0.2
727
Epoch 2846/4000
6/6 [==============================] - 0s 246us/sample - loss: 0.2
670
Epoch 2847/4000
6/6 [==============================] - 0s 212us/sample - loss: 0.2
691
Epoch 2848/4000
6/6 [==============================] - 0s 246us/sample - loss: 0.2
669
Epoch 2849/4000
6/6 [==============================] - 0s 202us/sample - loss: 0.2
646
Epoch 2850/4000
6/6 [==============================] - 0s 234us/sample - loss: 0.2
673
Epoch 2851/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.26
44
Epoch 2852/4000
6/6 [==============================] - 0s 253us/sample - loss: 0.2
622
Epoch 2853/4000
6/6 [==============================] - 0s 233us/sample - loss: 0.2
590
Epoch 2854/4000
6/6 [==============================] - 0s 309us/sample - loss: 0.2
567
Epoch 2855/4000
6/6 [==============================] - 0s 293us/sample - loss: 0.2
544
Epoch 2856/4000
6/6 [==============================] - 0s 204us/sample - loss: 0.2
513
Epoch 2857/4000
6/6 [==============================] - 0s 205us/sample - loss: 0.2
493
```

```
Epoch 2858/4000
6/6 [==============================] - 0s 199us/sample - loss: 0.2
525
Epoch 2859/4000
6/6 [==============================] - 0s 186us/sample - loss: 0.2
527
Epoch 2860/4000
6/6 [==============================] - 0s 198us/sample - loss: 0.2
469
Epoch 2861/4000
6/6 [==============================] - 0s 209us/sample - loss: 0.2
429
Epoch 2862/4000
6/6 [==============================] - 0s 327us/sample - loss: 0.2
429
Epoch 2863/4000
6/6 [==============================] - 0s 240us/sample - loss: 0.2
450
Epoch 2864/4000
6/6 [==============================] - 0s 254us/sample - loss: 0.2
399
Epoch 2865/4000
6/6 [==============================] - 0s 270us/sample - loss: 0.2
360
Epoch 2866/4000
6/6 [==============================] - 0s 268us/sample - loss: 0.2
338
Epoch 2867/4000
6/6 [==============================] - 0s 282us/sample - loss: 0.2
375
Epoch 2868/4000
6/6 [==============================] - 0s 238us/sample - loss: 0.2
368
Epoch 2869/4000
6/6 [==============================] - 0s 260us/sample - loss: 0.2
338
Epoch 2870/4000
6/6 [==============================] - 0s 275us/sample - loss: 0.2
316
Epoch 2871/4000
6/6 [==============================] - 0s 13ms/sample - loss: 0.22
94
Epoch 2872/4000
6/6 [==============================] - 0s 326us/sample - loss: 0.2
264
Epoch 2873/4000
6/6 [==============================] - 0s 239us/sample - loss: 0.2
247
Epoch 2874/4000
6/6 [==============================] - 0s 274us/sample - loss: 0.2
217
Epoch 2875/4000
6/6 [==============================] - 0s 238us/sample - loss: 0.2
243
Epoch 2876/4000
6/6 [==============================] - 0s 243us/sample - loss: 0.2
196
```

```
Epoch 2877/4000
6/6 [==============================] - 0s 261us/sample - loss: 0.2
174
Epoch 2878/4000
6/6 [==============================] - 0s 231us/sample - loss: 0.2
174
Epoch 2879/4000
6/6 [==============================] - 0s 256us/sample - loss: 0.2
174
Epoch 2880/4000
6/6 [==============================] - 0s 267us/sample - loss: 0.2
153
Epoch 2881/4000
6/6 [==============================] - 0s 13ms/sample - loss: 0.20
85
Epoch 2882/4000
6/6 [==============================] - 0s 319us/sample - loss: 0.2
133
Epoch 2883/4000
6/6 [==============================] - 0s 308us/sample - loss: 0.2
104
Epoch 2884/4000
6/6 [==============================] - 0s 265us/sample - loss: 0.2
104
Epoch 2885/4000
6/6 [==============================] - 0s 246us/sample - loss: 0.2
064
Epoch 2886/4000
6/6 [==============================] - 0s 280us/sample - loss: 0.2
039
Epoch 2887/4000
6/6 [==============================] - 0s 277us/sample - loss: 0.2
019
Epoch 2888/4000
6/6 [==============================] - 0s 278us/sample - loss: 0.1
991
Epoch 2889/4000
6/6 [==============================] - 0s 240us/sample - loss: 0.1
972
Epoch 2890/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.19
96
Epoch 2891/4000
6/6 [==============================] - 0s 255us/sample - loss: 0.1
998
Epoch 2892/4000
6/6 [==============================] - 0s 233us/sample - loss: 0.1
963
Epoch 2893/4000
6/6 [==============================] - 0s 213us/sample - loss: 0.1
917
Epoch 2894/4000
6/6 [==============================] - 0s 284us/sample - loss: 0.1
934
Epoch 2895/4000
6/6 [==============================] - 0s 214us/sample - loss: 0.1
934
```

```
Epoch 2896/4000
6/6 [==============================] - 0s 264us/sample - loss: 0.1
900
Epoch 2897/4000
6/6 [==============================] - 0s 196us/sample - loss: 0.1
850
Epoch 2898/4000
6/6 [==============================] - 0s 243us/sample - loss: 0.1
894
Epoch 2899/4000
6/6 [==============================] - 0s 244us/sample - loss: 0.1
868
Epoch 2900/4000
6/6 [==============================] - 0s 271us/sample - loss: 0.1
853
Epoch 2901/4000
6/6 [==============================] - 0s 234us/sample - loss: 0.1
830
Epoch 2902/4000
6/6 [==============================] - 0s 232us/sample - loss: 0.1
785
Epoch 2903/4000
6/6 [==============================] - 0s 287us/sample - loss: 0.1
796
Epoch 2904/4000
6/6 [==============================] - 0s 276us/sample - loss: 0.1
770
Epoch 2905/4000
6/6 [==============================] - 0s 247us/sample - loss: 0.1
753
Epoch 2906/4000
6/6 [==============================] - 0s 200us/sample - loss: 0.1
795
Epoch 2907/4000
6/6 [==============================] - 0s 204us/sample - loss: 0.1
751
Epoch 2908/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.17
32
Epoch 2909/4000
6/6 [==============================] - 0s 287us/sample - loss: 0.1
715
Epoch 2910/4000
6/6 [==============================] - 0s 218us/sample - loss: 0.1
733
Epoch 2911/4000
6/6 [==============================] - 0s 267us/sample - loss: 0.1
691
Epoch 2912/4000
6/6 [==============================] - 0s 233us/sample - loss: 0.1
672
Epoch 2913/4000
6/6 [==============================] - 0s 265us/sample - loss: 0.1
611
Epoch 2914/4000
6/6 [==============================] - 0s 213us/sample - loss: 0.1
629
```

```
Epoch 2915/4000
6/6 [==============================] - 0s 203us/sample - loss: 0.1
670
Epoch 2916/4000
6/6 [==============================] - 0s 245us/sample - loss: 0.1
628
Epoch 2917/4000
6/6 [==============================] - 0s 236us/sample - loss: 0.1
593
Epoch 2918/4000
6/6 [==============================] - 0s 203us/sample - loss: 0.1
568
Epoch 2919/4000
6/6 [==============================] - 0s 199us/sample - loss: 0.1
568
Epoch 2920/4000
6/6 [==============================] - 0s 13ms/sample - loss: 0.15
53
Epoch 2921/4000
6/6 [==============================] - 0s 274us/sample - loss: 0.1
513
Epoch 2922/4000
6/6 [==============================] - 0s 246us/sample - loss: 0.1
550
Epoch 2923/4000
6/6 [==============================] - 0s 227us/sample - loss: 0.1
533
Epoch 2924/4000
6/6 [==============================] - 0s 218us/sample - loss: 0.1
504
Epoch 2925/4000
6/6 [==============================] - 0s 244us/sample - loss: 0.1
501
Epoch 2926/4000
6/6 [==============================] - 0s 201us/sample - loss: 0.1
501
Epoch 2927/4000
6/6 [==============================] - 0s 214us/sample - loss: 0.1
460
Epoch 2928/4000
6/6 [==============================] - 0s 275us/sample - loss: 0.1
441
Epoch 2929/4000
6/6 [==============================] - 0s 213us/sample - loss: 0.1
405
Epoch 2930/4000
6/6 [==============================] - 0s 243us/sample - loss: 0.1
443
Epoch 2931/4000
6/6 [==============================] - 0s 13ms/sample - loss: 0.14
43
Epoch 2932/4000
6/6 [==============================] - 0s 313us/sample - loss: 0.1
401
Epoch 2933/4000
6/6 [==============================] - 0s 234us/sample - loss: 0.1
388
```

```
Epoch 2934/4000
6/6 [==============================] - 0s 219us/sample - loss: 0.1
348
Epoch 2935/4000
6/6 [==============================] - 0s 264us/sample - loss: 0.1
348
Epoch 2936/4000
6/6 [==============================] - 0s 242us/sample - loss: 0.1
346
Epoch 2937/4000
6/6 [==============================] - 0s 246us/sample - loss: 0.1
317
Epoch 2938/4000
6/6 [==============================] - 0s 270us/sample - loss: 0.1
356
Epoch 2939/4000
6/6 [==============================] - 0s 216us/sample - loss: 0.1
340
Epoch 2940/4000
6/6 [==============================] - 0s 212us/sample - loss: 0.1
304
Epoch 2941/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.12
88
Epoch 2942/4000
6/6 [==============================] - 0s 275us/sample - loss: 0.1
288
Epoch 2943/4000
6/6 [==============================] - 0s 215us/sample - loss: 0.1
264
Epoch 2944/4000
6/6 [==============================] - 0s 226us/sample - loss: 0.1
235
Epoch 2945/4000
6/6 [==============================] - 0s 241us/sample - loss: 0.1
200
Epoch 2946/4000
6/6 [==============================] - 0s 211us/sample - loss: 0.1
200
Epoch 2947/4000
6/6 [==============================] - 0s 213us/sample - loss: 0.1
248
Epoch 2948/4000
6/6 [==============================] - 0s 221us/sample - loss: 0.1
197
Epoch 2949/4000
6/6 [==============================] - 0s 256us/sample - loss: 0.1
184
Epoch 2950/4000
6/6 [==============================] - 0s 268us/sample - loss: 0.1
147
Epoch 2951/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.11
61
Epoch 2952/4000
6/6 [==============================] - 0s 274us/sample - loss: 0.1
147
```

```
Epoch 2953/4000
6/6 [==============================] - 0s 232us/sample - loss: 0.1
132
Epoch 2954/4000
6/6 [==============================] - 0s 278us/sample - loss: 0.1
117
Epoch 2955/4000
6/6 [==============================] - 0s 206us/sample - loss: 0.1
130
Epoch 2956/4000
6/6 [==============================] - 0s 286us/sample - loss: 0.1
117
Epoch 2957/4000
6/6 [==============================] - 0s 215us/sample - loss: 0.1
096
Epoch 2958/4000
6/6 [==============================] - 0s 240us/sample - loss: 0.1
081
Epoch 2959/4000
6/6 [==============================] - 0s 247us/sample - loss: 0.1
066
Epoch 2960/4000
6/6 [==============================] - 0s 204us/sample - loss: 0.1
047
Epoch 2961/4000
6/6 [==============================] - 0s 248us/sample - loss: 0.1
034
Epoch 2962/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.10
21
Epoch 2963/4000
6/6 [==============================] - 0s 318us/sample - loss: 0.1
055
Epoch 2964/4000
6/6 [==============================] - 0s 213us/sample - loss: 0.1
017
Epoch 2965/4000
6/6 [==============================] - 0s 228us/sample - loss: 0.0
992
Epoch 2966/4000
6/6 [==============================] - 0s 208us/sample - loss: 0.0
992
Epoch 2967/4000
6/6 [==============================] - 0s 211us/sample - loss: 0.1
007
Epoch 2968/4000
6/6 [==============================] - 0s 211us/sample - loss: 0.0
972
Epoch 2969/4000
6/6 [==============================] - 0s 207us/sample - loss: 0.0
947
Epoch 2970/4000
6/6 [==============================] - 0s 240us/sample - loss: 0.0
964
Epoch 2971/4000
6/6 [==============================] - 0s 203us/sample - loss: 0.0
959
```

```
Epoch 2972/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.09
54
Epoch 2973/4000
6/6 [==============================] - 0s 275us/sample - loss: 0.0
935
Epoch 2974/4000
6/6 [==============================] - 0s 226us/sample - loss: 0.0
921
Epoch 2975/4000
6/6 [==============================] - 0s 247us/sample - loss: 0.0
907
Epoch 2976/4000
6/6 [==============================] - 0s 239us/sample - loss: 0.0
889
Epoch 2977/4000
6/6 [==============================] - 0s 261us/sample - loss: 0.0
876
Epoch 2978/4000
6/6 [==============================] - 0s 215us/sample - loss: 0.0
889
Epoch 2979/4000
6/6 [==============================] - 0s 254us/sample - loss: 0.0
889
Epoch 2980/4000
6/6 [==============================] - 0s 254us/sample - loss: 0.0
845
Epoch 2981/4000
6/6 [==============================] - 0s 246us/sample - loss: 0.0
832
Epoch 2982/4000
6/6 [==============================] - 0s 257us/sample - loss: 0.0
832
Epoch 2983/4000
6/6 [==============================] - 0s 223us/sample - loss: 0.0
832
Epoch 2984/4000
6/6 [==============================] - 0s 259us/sample - loss: 0.0
819
Epoch 2985/4000
6/6 [==============================] - 0s 262us/sample - loss: 0.0
778
Epoch 2986/4000
6/6 [==============================] - 0s 209us/sample - loss: 0.0
778
Epoch 2987/4000
6/6 [==============================] - 0s 204us/sample - loss: 0.0
789
Epoch 2988/4000
6/6 [==============================] - 0s 226us/sample - loss: 0.0
789
Epoch 2989/4000
6/6 [==============================] - 0s 241us/sample - loss: 0.0
765
Epoch 2990/4000
6/6 [==============================] - 0s 239us/sample - loss: 0.0
761
```

```
Epoch 2991/4000
6/6 [==============================] - 0s 227us/sample - loss: 0.0
748
Epoch 2992/4000
6/6 [==============================] - 0s 13ms/sample - loss: 0.07
36
Epoch 2993/4000
6/6 [==============================] - 0s 263us/sample - loss: 0.0
719
Epoch 2994/4000
6/6 [==============================] - 0s 249us/sample - loss: 0.0
709
Epoch 2995/4000
6/6 [==============================] - 0s 231us/sample - loss: 0.0
697
Epoch 2996/4000
6/6 [==============================] - 0s 221us/sample - loss: 0.0
697
Epoch 2997/4000
6/6 [==============================] - 0s 206us/sample - loss: 0.0
727
Epoch 2998/4000
6/6 [==============================] - 0s 204us/sample - loss: 0.0
726
Epoch 2999/4000
6/6 [==============================] - 0s 202us/sample - loss: 0.0
726
Epoch 3000/4000
6/6 [==============================] - 0s 211us/sample - loss: 0.0
726
Epoch 3001/4000
6/6 [==============================] - 0s 234us/sample - loss: 0.0
726
Epoch 3002/4000
6/6 [==============================] - 0s 202us/sample - loss: 0.0
726
Epoch 3003/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.07
26
Epoch 3004/4000
6/6 [==============================] - 0s 261us/sample - loss: 0.0
726
Epoch 3005/4000
6/6 [==============================] - 0s 220us/sample - loss: 0.0
726
Epoch 3006/4000
6/6 [==============================] - 0s 249us/sample - loss: 0.0
726
Epoch 3007/4000
6/6 [==============================] - 0s 214us/sample - loss: 0.0
726
Epoch 3008/4000
6/6 [==============================] - 0s 214us/sample - loss: 0.0
726
Epoch 3009/4000
6/6 [==============================] - 0s 247us/sample - loss: 0.0
726
```

```
Epoch 3010/4000
6/6 [==============================] - 0s 225us/sample - loss: 0.0
726
Epoch 3011/4000
6/6 [==============================] - 0s 210us/sample - loss: 0.0
726
Epoch 3012/4000
6/6 [==============================] - 0s 240us/sample - loss: 0.0
726
Epoch 3013/4000
6/6 [==============================] - 0s 207us/sample - loss: 0.0
726
Epoch 3014/4000
6/6 [==============================] - 0s 202us/sample - loss: 0.0
726
Epoch 3015/4000
6/6 [==============================] - 0s 326us/sample - loss: 0.0
726
Epoch 3016/4000
6/6 [==============================] - 0s 261us/sample - loss: 0.0
726
Epoch 3017/4000
6/6 [==============================] - 0s 236us/sample - loss: 0.0
726
Epoch 3018/4000
6/6 [==============================] - 0s 261us/sample - loss: 0.0
726
Epoch 3019/4000
6/6 [==============================] - 0s 202us/sample - loss: 0.0
726
Epoch 3020/4000
6/6 [==============================] - 0s 211us/sample - loss: 0.0
726
Epoch 3021/4000
6/6 [==============================] - 0s 216us/sample - loss: 0.0
726
Epoch 3022/4000
6/6 [==============================] - 0s 231us/sample - loss: 0.0
726
Epoch 3023/4000
6/6 [==============================] - 0s 250us/sample - loss: 0.0
726
Epoch 3024/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.07
26
Epoch 3025/4000
6/6 [==============================] - 0s 258us/sample - loss: 0.0
727
Epoch 3026/4000
6/6 [==============================] - 0s 228us/sample - loss: 0.0
696
Epoch 3027/4000
6/6 [==============================] - 0s 251us/sample - loss: 0.0
675
Epoch 3028/4000
6/6 [==============================] - 0s 259us/sample - loss: 0.0
686
```

```
Epoch 3029/4000
6/6 [==============================] - 0s 214us/sample - loss: 0.0
686
Epoch 3030/4000
6/6 [==============================] - 0s 204us/sample - loss: 0.0
666
Epoch 3031/4000
6/6 [==============================] - 0s 219us/sample - loss: 0.0
666
Epoch 3032/4000
6/6 [==============================] - 0s 222us/sample - loss: 0.0
666
Epoch 3033/4000
6/6 [==============================] - 0s 194us/sample - loss: 0.0
666
Epoch 3034/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
66
Epoch 3035/4000
6/6 [==============================] - 0s 248us/sample - loss: 0.0
666
Epoch 3036/4000
6/6 [==============================] - 0s 238us/sample - loss: 0.0
666
Epoch 3037/4000
6/6 [==============================] - 0s 220us/sample - loss: 0.0
666
Epoch 3038/4000
6/6 [==============================] - 0s 246us/sample - loss: 0.0
666
Epoch 3039/4000
6/6 [==============================] - 0s 250us/sample - loss: 0.0
666
Epoch 3040/4000
6/6 [==============================] - 0s 218us/sample - loss: 0.0
666
Epoch 3041/4000
6/6 [==============================] - 0s 224us/sample - loss: 0.0
666
Epoch 3042/4000
6/6 [==============================] - 0s 252us/sample - loss: 0.0
666
Epoch 3043/4000
6/6 [==============================] - 0s 203us/sample - loss: 0.0
666
Epoch 3044/4000
6/6 [==============================] - 0s 273us/sample - loss: 0.0
666
Epoch 3045/4000
6/6 [==============================] - 0s 247us/sample - loss: 0.0
666
Epoch 3046/4000
6/6 [==============================] - 0s 231us/sample - loss: 0.0
666
Epoch 3047/4000
6/6 [==============================] - 0s 268us/sample - loss: 0.0
666
```

```
Epoch 3048/4000
6/6 [==============================] - 0s 254us/sample - loss: 0.0
666
Epoch 3049/4000
6/6 [==============================] - 0s 265us/sample - loss: 0.0
666
Epoch 3050/4000
6/6 [==============================] - 0s 227us/sample - loss: 0.0
666
Epoch 3051/4000
6/6 [==============================] - 0s 227us/sample - loss: 0.0
666
Epoch 3052/4000
6/6 [==============================] - 0s 200us/sample - loss: 0.0
666
Epoch 3053/4000
6/6 [==============================] - 0s 253us/sample - loss: 0.0
666
Epoch 3054/4000
6/6 [==============================] - 0s 301us/sample - loss: 0.0
666
Epoch 3055/4000
6/6 [==============================] - 0s 246us/sample - loss: 0.0
666
Epoch 3056/4000
6/6 [==============================] - 0s 243us/sample - loss: 0.0
666
Epoch 3057/4000
6/6 [==============================] - 0s 216us/sample - loss: 0.0
666
Epoch 3058/4000
6/6 [==============================] - 0s 248us/sample - loss: 0.0
666
Epoch 3059/4000
6/6 [==============================] - 0s 219us/sample - loss: 0.0
666
Epoch 3060/4000
6/6 [==============================] - 0s 214us/sample - loss: 0.0
666
Epoch 3061/4000
6/6 [==============================] - 0s 250us/sample - loss: 0.0
666
Epoch 3062/4000
6/6 [==============================] - 0s 239us/sample - loss: 0.0
666
Epoch 3063/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
66
Epoch 3064/4000
6/6 [==============================] - 0s 274us/sample - loss: 0.0
666
Epoch 3065/4000
6/6 [==============================] - 0s 223us/sample - loss: 0.0
666
Epoch 3066/4000
6/6 [==============================] - 0s 203us/sample - loss: 0.0
666
```

```
Epoch 3067/4000
6/6 [==============================] - 0s 219us/sample - loss: 0.0
666
Epoch 3068/4000
6/6 [==============================] - 0s 258us/sample - loss: 0.0
666
Epoch 3069/4000
6/6 [==============================] - 0s 263us/sample - loss: 0.0
666
Epoch 3070/4000
6/6 [==============================] - 0s 223us/sample - loss: 0.0
666
Epoch 3071/4000
6/6 [==============================] - 0s 211us/sample - loss: 0.0
666
Epoch 3072/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
66
Epoch 3073/4000
6/6 [==============================] - 0s 252us/sample - loss: 0.0
666
Epoch 3074/4000
6/6 [==============================] - 0s 265us/sample - loss: 0.0
666
Epoch 3075/4000
6/6 [==============================] - 0s 315us/sample - loss: 0.0
666
Epoch 3076/4000
6/6 [==============================] - 0s 222us/sample - loss: 0.0
666
Epoch 3077/4000
6/6 [==============================] - 0s 210us/sample - loss: 0.0
666
Epoch 3078/4000
6/6 [==============================] - 0s 219us/sample - loss: 0.0
666
Epoch 3079/4000
6/6 [==============================] - 0s 251us/sample - loss: 0.0
666
Epoch 3080/4000
6/6 [==============================] - 0s 264us/sample - loss: 0.0
666
Epoch 3081/4000
6/6 [==============================] - 0s 221us/sample - loss: 0.0
666
Epoch 3082/4000
6/6 [==============================] - 0s 230us/sample - loss: 0.0
666
Epoch 3083/4000
6/6 [==============================] - 0s 304us/sample - loss: 0.0
666
Epoch 3084/4000
6/6 [==============================] - 0s 262us/sample - loss: 0.0
666
Epoch 3085/4000
6/6 [==============================] - 0s 246us/sample - loss: 0.0
666
```

```
Epoch 3086/4000
6/6 [==============================] - 0s 221us/sample - loss: 0.0
666
Epoch 3087/4000
6/6 [==============================] - 0s 212us/sample - loss: 0.0
666
Epoch 3088/4000
6/6 [==============================] - 0s 219us/sample - loss: 0.0
666
Epoch 3089/4000
6/6 [==============================] - 0s 216us/sample - loss: 0.0
666
Epoch 3090/4000
6/6 [==============================] - 0s 246us/sample - loss: 0.0
666
Epoch 3091/4000
6/6 [==============================] - 0s 304us/sample - loss: 0.0
666
Epoch 3092/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
66
Epoch 3093/4000
6/6 [==============================] - 0s 320us/sample - loss: 0.0
666
Epoch 3094/4000
6/6 [==============================] - 0s 289us/sample - loss: 0.0
666
Epoch 3095/4000
6/6 [==============================] - 0s 208us/sample - loss: 0.0
666
Epoch 3096/4000
6/6 [==============================] - 0s 226us/sample - loss: 0.0
666
Epoch 3097/4000
6/6 [==============================] - 0s 212us/sample - loss: 0.0
666
Epoch 3098/4000
6/6 [==============================] - 0s 288us/sample - loss: 0.0
666
Epoch 3099/4000
6/6 [==============================] - 0s 242us/sample - loss: 0.0
666
Epoch 3100/4000
6/6 [==============================] - 0s 225us/sample - loss: 0.0
666
Epoch 3101/4000
6/6 [==============================] - 0s 235us/sample - loss: 0.0
666
Epoch 3102/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
66
Epoch 3103/4000
6/6 [==============================] - 0s 249us/sample - loss: 0.0
666
Epoch 3104/4000
6/6 [==============================] - 0s 294us/sample - loss: 0.0
666
```

```
Epoch 3105/4000
6/6 [==============================] - 0s 208us/sample - loss: 0.0
666
Epoch 3106/4000
6/6 [==============================] - 0s 262us/sample - loss: 0.0
666
Epoch 3107/4000
6/6 [==============================] - 0s 256us/sample - loss: 0.0
666
Epoch 3108/4000
6/6 [==============================] - 0s 266us/sample - loss: 0.0
666
Epoch 3109/4000
6/6 [==============================] - 0s 211us/sample - loss: 0.0
666
Epoch 3110/4000
6/6 [==============================] - 0s 219us/sample - loss: 0.0
666
Epoch 3111/4000
6/6 [==============================] - 0s 269us/sample - loss: 0.0
666
Epoch 3112/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
66
Epoch 3113/4000
6/6 [==============================] - 0s 262us/sample - loss: 0.0
666
Epoch 3114/4000
6/6 [==============================] - 0s 237us/sample - loss: 0.0
666
Epoch 3115/4000
6/6 [==============================] - 0s 217us/sample - loss: 0.0
666
Epoch 3116/4000
6/6 [==============================] - 0s 253us/sample - loss: 0.0
666
Epoch 3117/4000
6/6 [==============================] - 0s 231us/sample - loss: 0.0
666
Epoch 3118/4000
6/6 [==============================] - 0s 244us/sample - loss: 0.0
666
Epoch 3119/4000
6/6 [==============================] - 0s 221us/sample - loss: 0.0
666
Epoch 3120/4000
6/6 [==============================] - 0s 260us/sample - loss: 0.0
666
Epoch 3121/4000
6/6 [==============================] - 0s 221us/sample - loss: 0.0
666
Epoch 3122/4000
6/6 [==============================] - 0s 221us/sample - loss: 0.0
666
Epoch 3123/4000
6/6 [==============================] - 0s 298us/sample - loss: 0.0
666
```

```
Epoch 3124/4000
6/6 [==============================] - 0s 275us/sample - loss: 0.0
666
Epoch 3125/4000
6/6 [==============================] - 0s 217us/sample - loss: 0.0
666
Epoch 3126/4000
6/6 [==============================] - 0s 224us/sample - loss: 0.0
666
Epoch 3127/4000
6/6 [==============================] - 0s 254us/sample - loss: 0.0
666
Epoch 3128/4000
6/6 [==============================] - 0s 220us/sample - loss: 0.0
666
Epoch 3129/4000
6/6 [==============================] - 0s 209us/sample - loss: 0.0
666
Epoch 3130/4000
6/6 [==============================] - 0s 300us/sample - loss: 0.0
666
Epoch 3131/4000
6/6 [==============================] - 0s 235us/sample - loss: 0.0
666
Epoch 3132/4000
6/6 [==============================] - 0s 245us/sample - loss: 0.0
666
Epoch 3133/4000
6/6 [==============================] - 0s 13ms/sample - loss: 0.06
66
Epoch 3134/4000
6/6 [==============================] - 0s 239us/sample - loss: 0.0
666
Epoch 3135/4000
6/6 [==============================] - 0s 264us/sample - loss: 0.0
666
Epoch 3136/4000
6/6 [==============================] - 0s 243us/sample - loss: 0.0
666
Epoch 3137/4000
6/6 [==============================] - 0s 279us/sample - loss: 0.0
666
Epoch 3138/4000
6/6 [==============================] - 0s 256us/sample - loss: 0.0
666
Epoch 3139/4000
6/6 [==============================] - 0s 217us/sample - loss: 0.0
666
Epoch 3140/4000
6/6 [==============================] - 0s 249us/sample - loss: 0.0
666
Epoch 3141/4000
6/6 [==============================] - 0s 215us/sample - loss: 0.0
666
Epoch 3142/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
66
```

```
Epoch 3143/4000
6/6 [==============================] - 0s 257us/sample - loss: 0.0
666
Epoch 3144/4000
6/6 [==============================] - 0s 267us/sample - loss: 0.0
666
Epoch 3145/4000
6/6 [==============================] - 0s 223us/sample - loss: 0.0
666
Epoch 3146/4000
6/6 [==============================] - 0s 221us/sample - loss: 0.0
666
Epoch 3147/4000
6/6 [==============================] - 0s 279us/sample - loss: 0.0
666
Epoch 3148/4000
6/6 [==============================] - 0s 286us/sample - loss: 0.0
666
Epoch 3149/4000
6/6 [==============================] - 0s 212us/sample - loss: 0.0
666
Epoch 3150/4000
6/6 [==============================] - 0s 213us/sample - loss: 0.0
666
Epoch 3151/4000
6/6 [==============================] - 0s 218us/sample - loss: 0.0
666
Epoch 3152/4000
6/6 [==============================] - 0s 228us/sample - loss: 0.0
666
Epoch 3153/4000
6/6 [==============================] - 0s 13ms/sample - loss: 0.06
66
Epoch 3154/4000
6/6 [==============================] - 0s 247us/sample - loss: 0.0
666
Epoch 3155/4000
6/6 [==============================] - 0s 223us/sample - loss: 0.0
666
Epoch 3156/4000
6/6 [==============================] - 0s 251us/sample - loss: 0.0
666
Epoch 3157/4000
6/6 [==============================] - 0s 262us/sample - loss: 0.0
666
Epoch 3158/4000
6/6 [==============================] - 0s 241us/sample - loss: 0.0
666
Epoch 3159/4000
6/6 [==============================] - 0s 246us/sample - loss: 0.0
666
Epoch 3160/4000
6/6 [==============================] - 0s 210us/sample - loss: 0.0
666
Epoch 3161/4000
6/6 [==============================] - 0s 198us/sample - loss: 0.0
666
```

```
Epoch 3162/4000
6/6 [==============================] - 0s 207us/sample - loss: 0.0
666
Epoch 3163/4000
6/6 [==============================] - 0s 248us/sample - loss: 0.0
666
Epoch 3164/4000
6/6 [==============================] - 0s 13ms/sample - loss: 0.06
66
Epoch 3165/4000
6/6 [==============================] - 0s 267us/sample - loss: 0.0
666
Epoch 3166/4000
6/6 [==============================] - 0s 281us/sample - loss: 0.0
666
Epoch 3167/4000
6/6 [==============================] - 0s 257us/sample - loss: 0.0
666
Epoch 3168/4000
6/6 [==============================] - 0s 238us/sample - loss: 0.0
666
Epoch 3169/4000
6/6 [==============================] - 0s 217us/sample - loss: 0.0
666
Epoch 3170/4000
6/6 [==============================] - 0s 259us/sample - loss: 0.0
666
Epoch 3171/4000
6/6 [==============================] - 0s 213us/sample - loss: 0.0
666
Epoch 3172/4000
6/6 [==============================] - 0s 199us/sample - loss: 0.0
666
Epoch 3173/4000
6/6 [==============================] - 0s 204us/sample - loss: 0.0
666
Epoch 3174/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
66
Epoch 3175/4000
6/6 [==============================] - 0s 309us/sample - loss: 0.0
666
Epoch 3176/4000
6/6 [==============================] - 0s 256us/sample - loss: 0.0
666
Epoch 3177/4000
6/6 [==============================] - 0s 226us/sample - loss: 0.0
666
Epoch 3178/4000
6/6 [==============================] - 0s 227us/sample - loss: 0.0
666
Epoch 3179/4000
6/6 [==============================] - 0s 252us/sample - loss: 0.0
666
Epoch 3180/4000
6/6 [==============================] - 0s 261us/sample - loss: 0.0
666
```

```
Epoch 3181/4000
6/6 [==============================] - 0s 202us/sample - loss: 0.0
666
Epoch 3182/4000
6/6 [==============================] - 0s 216us/sample - loss: 0.0
666
Epoch 3183/4000
6/6 [==============================] - 0s 206us/sample - loss: 0.0
666
Epoch 3184/4000
6/6 [==============================] - 0s 261us/sample - loss: 0.0
666
Epoch 3185/4000
6/6 [==============================] - 0s 275us/sample - loss: 0.0
666
Epoch 3186/4000
6/6 [==============================] - 0s 239us/sample - loss: 0.0
666
Epoch 3187/4000
6/6 [==============================] - 0s 225us/sample - loss: 0.0
666
Epoch 3188/4000
6/6 [==============================] - 0s 226us/sample - loss: 0.0
666
Epoch 3189/4000
6/6 [==============================] - 0s 284us/sample - loss: 0.0
666
Epoch 3190/4000
6/6 [==============================] - 0s 223us/sample - loss: 0.0
666
Epoch 3191/4000
6/6 [==============================] - 0s 212us/sample - loss: 0.0
666
Epoch 3192/4000
6/6 [==============================] - 0s 211us/sample - loss: 0.0
666
Epoch 3193/4000
6/6 [==============================] - 0s 220us/sample - loss: 0.0
666
Epoch 3194/4000
6/6 [==============================] - 0s 264us/sample - loss: 0.0
666
Epoch 3195/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
66
Epoch 3196/4000
6/6 [==============================] - 0s 231us/sample - loss: 0.0
666
Epoch 3197/4000
6/6 [==============================] - 0s 207us/sample - loss: 0.0
666
Epoch 3198/4000
6/6 [==============================] - 0s 217us/sample - loss: 0.0
666
Epoch 3199/4000
6/6 [==============================] - 0s 258us/sample - loss: 0.0
666
```

```
Epoch 3200/4000
6/6 [==============================] - 0s 255us/sample - loss: 0.0
666
Epoch 3201/4000
6/6 [==============================] - 0s 271us/sample - loss: 0.0
666
Epoch 3202/4000
6/6 [==============================] - 0s 260us/sample - loss: 0.0
666
Epoch 3203/4000
6/6 [==============================] - 0s 219us/sample - loss: 0.0
666
Epoch 3204/4000
6/6 [==============================] - 0s 250us/sample - loss: 0.0
666
Epoch 3205/4000
6/6 [==============================] - 0s 252us/sample - loss: 0.0
666
Epoch 3206/4000
6/6 [==============================] - 0s 13ms/sample - loss: 0.06
66
Epoch 3207/4000
6/6 [==============================] - 0s 250us/sample - loss: 0.0
666
Epoch 3208/4000
6/6 [==============================] - 0s 226us/sample - loss: 0.0
666
Epoch 3209/4000
6/6 [==============================] - 0s 268us/sample - loss: 0.0
666
Epoch 3210/4000
6/6 [==============================] - 0s 215us/sample - loss: 0.0
666
Epoch 3211/4000
6/6 [==============================] - 0s 224us/sample - loss: 0.0
666
Epoch 3212/4000
6/6 [==============================] - 0s 273us/sample - loss: 0.0
666
Epoch 3213/4000
6/6 [==============================] - 0s 239us/sample - loss: 0.0
666
Epoch 3214/4000
6/6 [==============================] - 0s 275us/sample - loss: 0.0
666
Epoch 3215/4000
6/6 [==============================] - 0s 270us/sample - loss: 0.0
666
Epoch 3216/4000
6/6 [==============================] - 0s 280us/sample - loss: 0.0
666
Epoch 3217/4000
6/6 [==============================] - 0s 217us/sample - loss: 0.0
666
Epoch 3218/4000
6/6 [==============================] - 0s 235us/sample - loss: 0.0
666
```

```
Epoch 3219/4000
6/6 [==============================] - 0s 234us/sample - loss: 0.0
666
Epoch 3220/4000
6/6 [==============================] - 0s 200us/sample - loss: 0.0
666
Epoch 3221/4000
6/6 [==============================] - 0s 229us/sample - loss: 0.0
666
Epoch 3222/4000
6/6 [==============================] - 0s 200us/sample - loss: 0.0
666
Epoch 3223/4000
6/6 [==============================] - 0s 237us/sample - loss: 0.0
666
Epoch 3224/4000
6/6 [==============================] - 0s 243us/sample - loss: 0.0
666
Epoch 3225/4000
6/6 [==============================] - 0s 212us/sample - loss: 0.0
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Epoch 3226/4000
6/6 [==============================] - 0s 269us/sample - loss: 0.0
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Epoch 3227/4000
6/6 [==============================] - 0s 231us/sample - loss: 0.0
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Epoch 3228/4000
6/6 [==============================] - 0s 214us/sample - loss: 0.0
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Epoch 3229/4000
6/6 [==============================] - 0s 264us/sample - loss: 0.0
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Epoch 3230/4000
6/6 [==============================] - 0s 261us/sample - loss: 0.0
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Epoch 3231/4000
6/6 [==============================] - 0s 274us/sample - loss: 0.0
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Epoch 3232/4000
6/6 [==============================] - 0s 259us/sample - loss: 0.0
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Epoch 3233/4000
6/6 [==============================] - 0s 225us/sample - loss: 0.0
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Epoch 3234/4000
6/6 [==============================] - 0s 263us/sample - loss: 0.0
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Epoch 3235/4000
6/6 [==============================] - 0s 225us/sample - loss: 0.0
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Epoch 3236/4000
6/6 [==============================] - 0s 206us/sample - loss: 0.0
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Epoch 3237/4000
6/6 [==============================] - 0s 230us/sample - loss: 0.0
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Epoch 3238/4000
6/6 [==============================] - 0s 227us/sample - loss: 0.0
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Epoch 3239/4000
6/6 [==============================] - 0s 214us/sample - loss: 0.0
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Epoch 3240/4000
6/6 [==============================] - 0s 258us/sample - loss: 0.0
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Epoch 3241/4000
6/6 [==============================] - 0s 214us/sample - loss: 0.0
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Epoch 3242/4000
6/6 [==============================] - 0s 204us/sample - loss: 0.0
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Epoch 3243/4000
6/6 [==============================] - 0s 190us/sample - loss: 0.0
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Epoch 3244/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
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Epoch 3245/4000
6/6 [==============================] - 0s 264us/sample - loss: 0.0
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Epoch 3246/4000
6/6 [==============================] - 0s 274us/sample - loss: 0.0
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Epoch 3247/4000
6/6 [==============================] - 0s 195us/sample - loss: 0.0
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Epoch 3248/4000
6/6 [==============================] - 0s 209us/sample - loss: 0.0
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Epoch 3249/4000
6/6 [==============================] - 0s 237us/sample - loss: 0.0
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Epoch 3250/4000
6/6 [==============================] - 0s 242us/sample - loss: 0.0
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Epoch 3251/4000
6/6 [==============================] - 0s 215us/sample - loss: 0.0
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Epoch 3252/4000
6/6 [==============================] - 0s 242us/sample - loss: 0.0
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Epoch 3253/4000
6/6 [==============================] - 0s 201us/sample - loss: 0.0
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Epoch 3254/4000
6/6 [==============================] - 0s 202us/sample - loss: 0.0
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Epoch 3255/4000
6/6 [==============================] - 0s 247us/sample - loss: 0.0
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Epoch 3256/4000
6/6 [==============================] - 0s 319us/sample - loss: 0.0
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Epoch 3257/4000
6/6 [==============================] - 0s 253us/sample - loss: 0.0
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Epoch 3258/4000
6/6 [==============================] - 0s 247us/sample - loss: 0.0
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Epoch 3259/4000
6/6 [==============================] - 0s 229us/sample - loss: 0.0
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Epoch 3260/4000
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Epoch 3261/4000
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Epoch 3262/4000
6/6 [==============================] - 0s 220us/sample - loss: 0.0
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Epoch 3263/4000
6/6 [==============================] - 0s 256us/sample - loss: 0.0
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Epoch 3264/4000
6/6 [==============================] - 0s 229us/sample - loss: 0.0
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Epoch 3265/4000
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Epoch 3266/4000
6/6 [==============================] - 0s 251us/sample - loss: 0.0
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Epoch 3267/4000
6/6 [==============================] - 0s 311us/sample - loss: 0.0
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Epoch 3268/4000
6/6 [==============================] - 0s 236us/sample - loss: 0.0
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Epoch 3269/4000
6/6 [==============================] - 0s 260us/sample - loss: 0.0
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Epoch 3270/4000
6/6 [==============================] - 0s 231us/sample - loss: 0.0
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Epoch 3271/4000
6/6 [==============================] - 0s 219us/sample - loss: 0.0
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Epoch 3272/4000
6/6 [==============================] - 0s 215us/sample - loss: 0.0
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Epoch 3273/4000
6/6 [==============================] - 0s 264us/sample - loss: 0.0
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Epoch 3274/4000
6/6 [==============================] - 0s 220us/sample - loss: 0.0
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Epoch 3275/4000
6/6 [==============================] - 0s 307us/sample - loss: 0.0
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Epoch 3276/4000
6/6 [==============================] - 0s 303us/sample - loss: 0.0
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Epoch 3277/4000
6/6 [==============================] - 0s 216us/sample - loss: 0.0
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Epoch 3278/4000
6/6 [==============================] - 0s 217us/sample - loss: 0.0
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Epoch 3279/4000
6/6 [==============================] - 0s 237us/sample - loss: 0.0
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Epoch 3280/4000
6/6 [==============================] - 0s 268us/sample - loss: 0.0
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Epoch 3281/4000
6/6 [==============================] - 0s 230us/sample - loss: 0.0
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Epoch 3282/4000
6/6 [==============================] - 0s 254us/sample - loss: 0.0
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Epoch 3283/4000
6/6 [==============================] - 0s 213us/sample - loss: 0.0
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Epoch 3284/4000
6/6 [==============================] - 0s 219us/sample - loss: 0.0
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Epoch 3285/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
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Epoch 3286/4000
6/6 [==============================] - 0s 238us/sample - loss: 0.0
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Epoch 3287/4000
6/6 [==============================] - 0s 215us/sample - loss: 0.0
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Epoch 3288/4000
6/6 [==============================] - 0s 231us/sample - loss: 0.0
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Epoch 3289/4000
6/6 [==============================] - 0s 253us/sample - loss: 0.0
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Epoch 3290/4000
6/6 [==============================] - 0s 208us/sample - loss: 0.0
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Epoch 3291/4000
6/6 [==============================] - 0s 217us/sample - loss: 0.0
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Epoch 3292/4000
6/6 [==============================] - 0s 216us/sample - loss: 0.0
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Epoch 3293/4000
6/6 [==============================] - 0s 219us/sample - loss: 0.0
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Epoch 3294/4000
6/6 [==============================] - 0s 239us/sample - loss: 0.0
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Epoch 3295/4000
6/6 [==============================] - 0s 279us/sample - loss: 0.0
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Epoch 3296/4000
6/6 [==============================] - 0s 260us/sample - loss: 0.0
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Epoch 3297/4000
6/6 [==============================] - 0s 209us/sample - loss: 0.0
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Epoch 3298/4000
6/6 [==============================] - 0s 258us/sample - loss: 0.0
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Epoch 3299/4000
6/6 [==============================] - 0s 210us/sample - loss: 0.0
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Epoch 3300/4000
6/6 [==============================] - 0s 230us/sample - loss: 0.0
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Epoch 3301/4000
6/6 [==============================] - 0s 227us/sample - loss: 0.0
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Epoch 3302/4000
6/6 [==============================] - 0s 246us/sample - loss: 0.0
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Epoch 3303/4000
6/6 [==============================] - 0s 249us/sample - loss: 0.0
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Epoch 3304/4000
6/6 [==============================] - 0s 205us/sample - loss: 0.0
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Epoch 3305/4000
6/6 [==============================] - 0s 269us/sample - loss: 0.0
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Epoch 3306/4000
6/6 [==============================] - 0s 292us/sample - loss: 0.0
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Epoch 3307/4000
6/6 [==============================] - 0s 226us/sample - loss: 0.0
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Epoch 3308/4000
6/6 [==============================] - 0s 214us/sample - loss: 0.0
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Epoch 3309/4000
6/6 [==============================] - 0s 226us/sample - loss: 0.0
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Epoch 3310/4000
6/6 [==============================] - 0s 229us/sample - loss: 0.0
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Epoch 3311/4000
6/6 [==============================] - 0s 224us/sample - loss: 0.0
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Epoch 3312/4000
6/6 [==============================] - 0s 208us/sample - loss: 0.0
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Epoch 3313/4000
6/6 [==============================] - 0s 223us/sample - loss: 0.0
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Epoch 3314/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
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Epoch 3315/4000
6/6 [==============================] - 0s 283us/sample - loss: 0.0
666
Epoch 3316/4000
6/6 [==============================] - 0s 298us/sample - loss: 0.0
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Epoch 3317/4000
6/6 [==============================] - 0s 252us/sample - loss: 0.0
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Epoch 3318/4000
6/6 [==============================] - 0s 211us/sample - loss: 0.0
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Epoch 3319/4000
6/6 [==============================] - 0s 228us/sample - loss: 0.0
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Epoch 3320/4000
6/6 [==============================] - 0s 306us/sample - loss: 0.0
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Epoch 3321/4000
6/6 [==============================] - 0s 218us/sample - loss: 0.0
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Epoch 3322/4000
6/6 [==============================] - 0s 249us/sample - loss: 0.0
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Epoch 3323/4000
6/6 [==============================] - 0s 210us/sample - loss: 0.0
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Epoch 3324/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
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Epoch 3325/4000
6/6 [==============================] - 0s 246us/sample - loss: 0.0
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Epoch 3326/4000
6/6 [==============================] - 0s 247us/sample - loss: 0.0
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Epoch 3327/4000
6/6 [==============================] - 0s 223us/sample - loss: 0.0
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Epoch 3328/4000
6/6 [==============================] - 0s 244us/sample - loss: 0.0
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Epoch 3329/4000
6/6 [==============================] - 0s 233us/sample - loss: 0.0
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Epoch 3330/4000
6/6 [==============================] - 0s 229us/sample - loss: 0.0
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Epoch 3331/4000
6/6 [==============================] - 0s 210us/sample - loss: 0.0
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Epoch 3332/4000
6/6 [==============================] - 0s 215us/sample - loss: 0.0
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Epoch 3333/4000
6/6 [==============================] - 0s 215us/sample - loss: 0.0
666
Epoch 3334/4000
6/6 [==============================] - 0s 244us/sample - loss: 0.0
666
Epoch 3335/4000
6/6 [==============================] - 0s 13ms/sample - loss: 0.06
66
Epoch 3336/4000
6/6 [==============================] - 0s 262us/sample - loss: 0.0
666
Epoch 3337/4000
6/6 [==============================] - 0s 228us/sample - loss: 0.0
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Epoch 3338/4000
6/6 [==============================] - 0s 235us/sample - loss: 0.0
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Epoch 3339/4000
6/6 [==============================] - 0s 284us/sample - loss: 0.0
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Epoch 3340/4000
6/6 [==============================] - 0s 272us/sample - loss: 0.0
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Epoch 3341/4000
6/6 [==============================] - 0s 212us/sample - loss: 0.0
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Epoch 3342/4000
6/6 [==============================] - 0s 248us/sample - loss: 0.0
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Epoch 3343/4000
6/6 [==============================] - 0s 240us/sample - loss: 0.0
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Epoch 3344/4000
6/6 [==============================] - 0s 278us/sample - loss: 0.0
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Epoch 3345/4000
6/6 [==============================] - 0s 265us/sample - loss: 0.0
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Epoch 3346/4000
6/6 [==============================] - 0s 220us/sample - loss: 0.0
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Epoch 3347/4000
6/6 [==============================] - 0s 294us/sample - loss: 0.0
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Epoch 3348/4000
6/6 [==============================] - 0s 229us/sample - loss: 0.0
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Epoch 3349/4000
6/6 [==============================] - 0s 243us/sample - loss: 0.0
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Epoch 3350/4000
6/6 [==============================] - 0s 240us/sample - loss: 0.0
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Epoch 3351/4000
6/6 [==============================] - 0s 269us/sample - loss: 0.0
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Epoch 3352/4000
6/6 [==============================] - 0s 210us/sample - loss: 0.0
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Epoch 3353/4000
6/6 [==============================] - 0s 240us/sample - loss: 0.0
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Epoch 3354/4000
6/6 [==============================] - 0s 251us/sample - loss: 0.0
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Epoch 3355/4000
6/6 [==============================] - 0s 290us/sample - loss: 0.0
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Epoch 3356/4000
6/6 [==============================] - 0s 280us/sample - loss: 0.0
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Epoch 3357/4000
6/6 [==============================] - 0s 232us/sample - loss: 0.0
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Epoch 3358/4000
6/6 [==============================] - 0s 291us/sample - loss: 0.0
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Epoch 3359/4000
6/6 [==============================] - 0s 236us/sample - loss: 0.0
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Epoch 3360/4000
6/6 [==============================] - 0s 249us/sample - loss: 0.0
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Epoch 3361/4000
6/6 [==============================] - 0s 209us/sample - loss: 0.0
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Epoch 3362/4000
6/6 [==============================] - 0s 260us/sample - loss: 0.0
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Epoch 3363/4000
6/6 [==============================] - 0s 211us/sample - loss: 0.0
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Epoch 3364/4000
6/6 [==============================] - 0s 203us/sample - loss: 0.0
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Epoch 3365/4000
6/6 [==============================] - 0s 204us/sample - loss: 0.0
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Epoch 3366/4000
6/6 [==============================] - 0s 291us/sample - loss: 0.0
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Epoch 3367/4000
6/6 [==============================] - 0s 253us/sample - loss: 0.0
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Epoch 3368/4000
6/6 [==============================] - 0s 257us/sample - loss: 0.0
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Epoch 3369/4000
6/6 [==============================] - 0s 217us/sample - loss: 0.0
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Epoch 3370/4000
6/6 [==============================] - 0s 219us/sample - loss: 0.0
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Epoch 3371/4000
6/6 [==============================] - 0s 263us/sample - loss: 0.0
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Epoch 3372/4000
6/6 [==============================] - 0s 238us/sample - loss: 0.0
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Epoch 3373/4000
6/6 [==============================] - 0s 214us/sample - loss: 0.0
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Epoch 3374/4000
6/6 [==============================] - 0s 241us/sample - loss: 0.0
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Epoch 3375/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
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Epoch 3376/4000
6/6 [==============================] - 0s 264us/sample - loss: 0.0
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Epoch 3377/4000
6/6 [==============================] - 0s 263us/sample - loss: 0.0
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Epoch 3378/4000
6/6 [==============================] - 0s 230us/sample - loss: 0.0
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Epoch 3379/4000
6/6 [==============================] - 0s 267us/sample - loss: 0.0
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Epoch 3380/4000
6/6 [==============================] - 0s 258us/sample - loss: 0.0
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Epoch 3381/4000
6/6 [==============================] - 0s 221us/sample - loss: 0.0
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Epoch 3382/4000
6/6 [==============================] - 0s 221us/sample - loss: 0.0
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Epoch 3383/4000
6/6 [==============================] - 0s 219us/sample - loss: 0.0
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Epoch 3384/4000
6/6 [==============================] - 0s 226us/sample - loss: 0.0
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Epoch 3385/4000
6/6 [==============================] - 0s 282us/sample - loss: 0.0
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Epoch 3386/4000
6/6 [==============================] - 0s 269us/sample - loss: 0.0
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Epoch 3387/4000
6/6 [==============================] - 0s 227us/sample - loss: 0.0
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Epoch 3388/4000
6/6 [==============================] - 0s 274us/sample - loss: 0.0
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Epoch 3389/4000
6/6 [==============================] - 0s 221us/sample - loss: 0.0
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Epoch 3390/4000
6/6 [==============================] - 0s 198us/sample - loss: 0.0
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Epoch 3391/4000
6/6 [==============================] - 0s 208us/sample - loss: 0.0
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Epoch 3392/4000
6/6 [==============================] - 0s 221us/sample - loss: 0.0
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Epoch 3393/4000
6/6 [==============================] - 0s 209us/sample - loss: 0.0
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Epoch 3394/4000
6/6 [==============================] - 0s 214us/sample - loss: 0.0
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Epoch 3395/4000
6/6 [==============================] - 0s 216us/sample - loss: 0.0
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Epoch 3396/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
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Epoch 3397/4000
6/6 [==============================] - 0s 246us/sample - loss: 0.0
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Epoch 3398/4000
6/6 [==============================] - 0s 249us/sample - loss: 0.0
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Epoch 3399/4000
6/6 [==============================] - 0s 253us/sample - loss: 0.0
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Epoch 3400/4000
6/6 [==============================] - 0s 197us/sample - loss: 0.0
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Epoch 3401/4000
6/6 [==============================] - 0s 257us/sample - loss: 0.0
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Epoch 3402/4000
6/6 [==============================] - 0s 224us/sample - loss: 0.0
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Epoch 3403/4000
6/6 [==============================] - 0s 262us/sample - loss: 0.0
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Epoch 3404/4000
6/6 [==============================] - 0s 226us/sample - loss: 0.0
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Epoch 3405/4000
6/6 [==============================] - 0s 205us/sample - loss: 0.0
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Epoch 3406/4000
6/6 [==============================] - 0s 196us/sample - loss: 0.0
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Epoch 3407/4000
6/6 [==============================] - 0s 13ms/sample - loss: 0.06
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Epoch 3408/4000
6/6 [==============================] - 0s 254us/sample - loss: 0.0
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Epoch 3409/4000
6/6 [==============================] - 0s 228us/sample - loss: 0.0
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Epoch 3410/4000
6/6 [==============================] - 0s 232us/sample - loss: 0.0
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Epoch 3411/4000
6/6 [==============================] - 0s 217us/sample - loss: 0.0
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Epoch 3412/4000
6/6 [==============================] - 0s 247us/sample - loss: 0.0
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Epoch 3413/4000
6/6 [==============================] - 0s 216us/sample - loss: 0.0
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Epoch 3414/4000
6/6 [==============================] - 0s 207us/sample - loss: 0.0
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Epoch 3415/4000
6/6 [==============================] - 0s 215us/sample - loss: 0.0
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Epoch 3416/4000
6/6 [==============================] - 0s 208us/sample - loss: 0.0
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Epoch 3417/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
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Epoch 3418/4000
6/6 [==============================] - 0s 289us/sample - loss: 0.0
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Epoch 3419/4000
6/6 [==============================] - 0s 225us/sample - loss: 0.0
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Epoch 3420/4000
6/6 [==============================] - 0s 261us/sample - loss: 0.0
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Epoch 3421/4000
6/6 [==============================] - 0s 246us/sample - loss: 0.0
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Epoch 3422/4000
6/6 [==============================] - 0s 252us/sample - loss: 0.0
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Epoch 3423/4000
6/6 [==============================] - 0s 249us/sample - loss: 0.0
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Epoch 3424/4000
6/6 [==============================] - 0s 218us/sample - loss: 0.0
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Epoch 3425/4000
6/6 [==============================] - 0s 214us/sample - loss: 0.0
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Epoch 3426/4000
6/6 [==============================] - 0s 216us/sample - loss: 0.0
666
Epoch 3427/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
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Epoch 3428/4000
6/6 [==============================] - 0s 329us/sample - loss: 0.0
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Epoch 3429/4000
6/6 [==============================] - 0s 297us/sample - loss: 0.0
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Epoch 3430/4000
6/6 [==============================] - 0s 280us/sample - loss: 0.0
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Epoch 3431/4000
6/6 [==============================] - 0s 225us/sample - loss: 0.0
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Epoch 3432/4000
6/6 [==============================] - 0s 284us/sample - loss: 0.0
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Epoch 3433/4000
6/6 [==============================] - 0s 236us/sample - loss: 0.0
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Epoch 3434/4000
6/6 [==============================] - 0s 205us/sample - loss: 0.0
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Epoch 3435/4000
6/6 [==============================] - 0s 357us/sample - loss: 0.0
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Epoch 3436/4000
6/6 [==============================] - 0s 237us/sample - loss: 0.0
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Epoch 3437/4000
6/6 [==============================] - 0s 190us/sample - loss: 0.0
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Epoch 3438/4000
6/6 [==============================] - 0s 207us/sample - loss: 0.0
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Epoch 3439/4000
6/6 [==============================] - 0s 277us/sample - loss: 0.0
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Epoch 3440/4000
6/6 [==============================] - 0s 241us/sample - loss: 0.0
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Epoch 3441/4000
6/6 [==============================] - 0s 212us/sample - loss: 0.0
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Epoch 3442/4000
6/6 [==============================] - 0s 194us/sample - loss: 0.0
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Epoch 3443/4000
6/6 [==============================] - 0s 239us/sample - loss: 0.0
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Epoch 3444/4000
6/6 [==============================] - 0s 227us/sample - loss: 0.0
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Epoch 3445/4000
6/6 [==============================] - 0s 244us/sample - loss: 0.0
666
Epoch 3446/4000
6/6 [==============================] - 0s 13ms/sample - loss: 0.06
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Epoch 3447/4000
6/6 [==============================] - 0s 243us/sample - loss: 0.0
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Epoch 3448/4000
6/6 [==============================] - 0s 235us/sample - loss: 0.0
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Epoch 3449/4000
6/6 [==============================] - 0s 223us/sample - loss: 0.0
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Epoch 3450/4000
6/6 [==============================] - 0s 228us/sample - loss: 0.0
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Epoch 3451/4000
6/6 [==============================] - 0s 247us/sample - loss: 0.0
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Epoch 3452/4000
6/6 [==============================] - 0s 242us/sample - loss: 0.0
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Epoch 3453/4000
6/6 [==============================] - 0s 216us/sample - loss: 0.0
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Epoch 3454/4000
6/6 [==============================] - 0s 209us/sample - loss: 0.0
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Epoch 3455/4000
6/6 [==============================] - 0s 214us/sample - loss: 0.0
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Epoch 3456/4000
6/6 [==============================] - 0s 205us/sample - loss: 0.0
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Epoch 3457/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
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Epoch 3458/4000
6/6 [==============================] - 0s 268us/sample - loss: 0.0
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Epoch 3459/4000
6/6 [==============================] - 0s 232us/sample - loss: 0.0
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Epoch 3460/4000
6/6 [==============================] - 0s 233us/sample - loss: 0.0
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Epoch 3461/4000
6/6 [==============================] - 0s 214us/sample - loss: 0.0
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Epoch 3462/4000
6/6 [==============================] - 0s 210us/sample - loss: 0.0
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Epoch 3463/4000
6/6 [==============================] - 0s 230us/sample - loss: 0.0
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Epoch 3464/4000
6/6 [==============================] - 0s 220us/sample - loss: 0.0
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Epoch 3465/4000
6/6 [==============================] - 0s 254us/sample - loss: 0.0
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Epoch 3466/4000
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Epoch 3467/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
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Epoch 3468/4000
6/6 [==============================] - 0s 272us/sample - loss: 0.0
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Epoch 3469/4000
6/6 [==============================] - 0s 242us/sample - loss: 0.0
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Epoch 3470/4000
6/6 [==============================] - 0s 260us/sample - loss: 0.0
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Epoch 3471/4000
6/6 [==============================] - 0s 216us/sample - loss: 0.0
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Epoch 3472/4000
6/6 [==============================] - 0s 295us/sample - loss: 0.0
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Epoch 3473/4000
6/6 [==============================] - 0s 215us/sample - loss: 0.0
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Epoch 3474/4000
6/6 [==============================] - 0s 207us/sample - loss: 0.0
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Epoch 3475/4000
6/6 [==============================] - 0s 217us/sample - loss: 0.0
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Epoch 3476/4000
6/6 [==============================] - 0s 219us/sample - loss: 0.0
666
Epoch 3477/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
66
Epoch 3478/4000
6/6 [==============================] - 0s 273us/sample - loss: 0.0
666
Epoch 3479/4000
6/6 [==============================] - 0s 222us/sample - loss: 0.0
666
Epoch 3480/4000
6/6 [==============================] - 0s 257us/sample - loss: 0.0
666
Epoch 3481/4000
6/6 [==============================] - 0s 272us/sample - loss: 0.0
666
Epoch 3482/4000
6/6 [==============================] - 0s 221us/sample - loss: 0.0
666
Epoch 3483/4000
6/6 [==============================] - 0s 233us/sample - loss: 0.0
666
Epoch 3484/4000
6/6 [==============================] - 0s 284us/sample - loss: 0.0
666
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Epoch 3485/4000
6/6 [==============================] - 0s 210us/sample - loss: 0.0
666
Epoch 3486/4000
6/6 [==============================] - 0s 236us/sample - loss: 0.0
666
Epoch 3487/4000
6/6 [==============================] - 0s 272us/sample - loss: 0.0
666
Epoch 3488/4000
6/6 [==============================] - 0s 244us/sample - loss: 0.0
666
Epoch 3489/4000
6/6 [==============================] - 0s 244us/sample - loss: 0.0
666
Epoch 3490/4000
6/6 [==============================] - 0s 303us/sample - loss: 0.0
666
Epoch 3491/4000
6/6 [==============================] - 0s 248us/sample - loss: 0.0
666
Epoch 3492/4000
6/6 [==============================] - 0s 214us/sample - loss: 0.0
666
Epoch 3493/4000
6/6 [==============================] - 0s 246us/sample - loss: 0.0
666
Epoch 3494/4000
6/6 [==============================] - 0s 254us/sample - loss: 0.0
666
Epoch 3495/4000
6/6 [==============================] - 0s 204us/sample - loss: 0.0
666
Epoch 3496/4000
6/6 [==============================] - 0s 237us/sample - loss: 0.0
666
Epoch 3497/4000
6/6 [==============================] - 0s 241us/sample - loss: 0.0
666
Epoch 3498/4000
6/6 [==============================] - 0s 13ms/sample - loss: 0.06
66
Epoch 3499/4000
6/6 [==============================] - 0s 226us/sample - loss: 0.0
666
Epoch 3500/4000
6/6 [==============================] - 0s 225us/sample - loss: 0.0
666
Epoch 3501/4000
6/6 [==============================] - 0s 190us/sample - loss: 0.0
666
Epoch 3502/4000
6/6 [==============================] - 0s 248us/sample - loss: 0.0
666
Epoch 3503/4000
6/6 [==============================] - 0s 251us/sample - loss: 0.0
666
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Epoch 3504/4000
6/6 [==============================] - 0s 209us/sample - loss: 0.0
666
Epoch 3505/4000
6/6 [==============================] - 0s 252us/sample - loss: 0.0
666
Epoch 3506/4000
6/6 [==============================] - 0s 211us/sample - loss: 0.0
666
Epoch 3507/4000
6/6 [==============================] - 0s 273us/sample - loss: 0.0
666
Epoch 3508/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
66
Epoch 3509/4000
6/6 [==============================] - 0s 325us/sample - loss: 0.0
666
Epoch 3510/4000
6/6 [==============================] - 0s 251us/sample - loss: 0.0
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Epoch 3511/4000
6/6 [==============================] - 0s 229us/sample - loss: 0.0
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Epoch 3512/4000
6/6 [==============================] - 0s 217us/sample - loss: 0.0
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Epoch 3513/4000
6/6 [==============================] - 0s 209us/sample - loss: 0.0
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Epoch 3514/4000
6/6 [==============================] - 0s 228us/sample - loss: 0.0
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Epoch 3515/4000
6/6 [==============================] - 0s 205us/sample - loss: 0.0
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Epoch 3516/4000
6/6 [==============================] - 0s 228us/sample - loss: 0.0
666
Epoch 3517/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
66
Epoch 3518/4000
6/6 [==============================] - 0s 341us/sample - loss: 0.0
666
Epoch 3519/4000
6/6 [==============================] - 0s 284us/sample - loss: 0.0
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Epoch 3520/4000
6/6 [==============================] - 0s 272us/sample - loss: 0.0
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Epoch 3521/4000
6/6 [==============================] - 0s 233us/sample - loss: 0.0
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Epoch 3522/4000
6/6 [==============================] - 0s 232us/sample - loss: 0.0
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Epoch 3523/4000
6/6 [==============================] - 0s 216us/sample - loss: 0.0
666
Epoch 3524/4000
6/6 [==============================] - 0s 214us/sample - loss: 0.0
666
Epoch 3525/4000
6/6 [==============================] - 0s 197us/sample - loss: 0.0
666
Epoch 3526/4000
6/6 [==============================] - 0s 254us/sample - loss: 0.0
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Epoch 3527/4000
6/6 [==============================] - 0s 308us/sample - loss: 0.0
666
Epoch 3528/4000
6/6 [==============================] - 0s 251us/sample - loss: 0.0
666
Epoch 3529/4000
6/6 [==============================] - 0s 206us/sample - loss: 0.0
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Epoch 3530/4000
6/6 [==============================] - 0s 229us/sample - loss: 0.0
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Epoch 3531/4000
6/6 [==============================] - 0s 212us/sample - loss: 0.0
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Epoch 3532/4000
6/6 [==============================] - 0s 195us/sample - loss: 0.0
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Epoch 3533/4000
6/6 [==============================] - 0s 209us/sample - loss: 0.0
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Epoch 3534/4000
6/6 [==============================] - 0s 192us/sample - loss: 0.0
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Epoch 3535/4000
6/6 [==============================] - 0s 254us/sample - loss: 0.0
666
Epoch 3536/4000
6/6 [==============================] - 0s 255us/sample - loss: 0.0
666
Epoch 3537/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
66
Epoch 3538/4000
6/6 [==============================] - 0s 274us/sample - loss: 0.0
666
Epoch 3539/4000
6/6 [==============================] - 0s 290us/sample - loss: 0.0
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Epoch 3540/4000
6/6 [==============================] - 0s 228us/sample - loss: 0.0
666
Epoch 3541/4000
6/6 [==============================] - 0s 211us/sample - loss: 0.0
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Epoch 3542/4000
6/6 [==============================] - 0s 239us/sample - loss: 0.0
666
Epoch 3543/4000
6/6 [==============================] - 0s 227us/sample - loss: 0.0
666
Epoch 3544/4000
6/6 [==============================] - 0s 216us/sample - loss: 0.0
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Epoch 3545/4000
6/6 [==============================] - 0s 244us/sample - loss: 0.0
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Epoch 3546/4000
6/6 [==============================] - 0s 202us/sample - loss: 0.0
666
Epoch 3547/4000
6/6 [==============================] - 0s 256us/sample - loss: 0.0
666
Epoch 3548/4000
6/6 [==============================] - 0s 240us/sample - loss: 0.0
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Epoch 3549/4000
6/6 [==============================] - 0s 208us/sample - loss: 0.0
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Epoch 3550/4000
6/6 [==============================] - 0s 247us/sample - loss: 0.0
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Epoch 3551/4000
6/6 [==============================] - 0s 210us/sample - loss: 0.0
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Epoch 3552/4000
6/6 [==============================] - 0s 219us/sample - loss: 0.0
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Epoch 3553/4000
6/6 [==============================] - 0s 214us/sample - loss: 0.0
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Epoch 3554/4000
6/6 [==============================] - 0s 221us/sample - loss: 0.0
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Epoch 3555/4000
6/6 [==============================] - 0s 207us/sample - loss: 0.0
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Epoch 3556/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
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Epoch 3557/4000
6/6 [==============================] - 0s 255us/sample - loss: 0.0
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Epoch 3558/4000
6/6 [==============================] - 0s 239us/sample - loss: 0.0
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Epoch 3559/4000
6/6 [==============================] - 0s 207us/sample - loss: 0.0
666
Epoch 3560/4000
6/6 [==============================] - 0s 280us/sample - loss: 0.0
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Epoch 3561/4000
6/6 [==============================] - 0s 243us/sample - loss: 0.0
666
Epoch 3562/4000
6/6 [==============================] - 0s 216us/sample - loss: 0.0
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Epoch 3563/4000
6/6 [==============================] - 0s 290us/sample - loss: 0.0
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Epoch 3564/4000
6/6 [==============================] - 0s 254us/sample - loss: 0.0
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Epoch 3565/4000
6/6 [==============================] - 0s 212us/sample - loss: 0.0
666
Epoch 3566/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
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Epoch 3567/4000
6/6 [==============================] - 0s 257us/sample - loss: 0.0
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Epoch 3568/4000
6/6 [==============================] - 0s 240us/sample - loss: 0.0
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Epoch 3569/4000
6/6 [==============================] - 0s 251us/sample - loss: 0.0
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Epoch 3570/4000
6/6 [==============================] - 0s 283us/sample - loss: 0.0
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Epoch 3571/4000
6/6 [==============================] - 0s 226us/sample - loss: 0.0
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Epoch 3572/4000
6/6 [==============================] - 0s 213us/sample - loss: 0.0
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Epoch 3573/4000
6/6 [==============================] - 0s 239us/sample - loss: 0.0
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Epoch 3574/4000
6/6 [==============================] - 0s 249us/sample - loss: 0.0
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Epoch 3575/4000
6/6 [==============================] - 0s 209us/sample - loss: 0.0
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Epoch 3576/4000
6/6 [==============================] - 0s 238us/sample - loss: 0.0
666
Epoch 3577/4000
6/6 [==============================] - 0s 275us/sample - loss: 0.0
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Epoch 3578/4000
6/6 [==============================] - 0s 237us/sample - loss: 0.0
666
Epoch 3579/4000
6/6 [==============================] - 0s 212us/sample - loss: 0.0
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Epoch 3580/4000
6/6 [==============================] - 0s 227us/sample - loss: 0.0
666
Epoch 3581/4000
6/6 [==============================] - 0s 278us/sample - loss: 0.0
666
Epoch 3582/4000
6/6 [==============================] - 0s 208us/sample - loss: 0.0
666
Epoch 3583/4000
6/6 [==============================] - 0s 240us/sample - loss: 0.0
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Epoch 3584/4000
6/6 [==============================] - 0s 258us/sample - loss: 0.0
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Epoch 3585/4000
6/6 [==============================] - 0s 239us/sample - loss: 0.0
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Epoch 3586/4000
6/6 [==============================] - 0s 247us/sample - loss: 0.0
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Epoch 3587/4000
6/6 [==============================] - 0s 252us/sample - loss: 0.0
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Epoch 3588/4000
6/6 [==============================] - 0s 249us/sample - loss: 0.0
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Epoch 3589/4000
6/6 [==============================] - 0s 250us/sample - loss: 0.0
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Epoch 3590/4000
6/6 [==============================] - 0s 289us/sample - loss: 0.0
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Epoch 3591/4000
6/6 [==============================] - 0s 227us/sample - loss: 0.0
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Epoch 3592/4000
6/6 [==============================] - 0s 267us/sample - loss: 0.0
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Epoch 3593/4000
6/6 [==============================] - 0s 241us/sample - loss: 0.0
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Epoch 3594/4000
6/6 [==============================] - 0s 232us/sample - loss: 0.0
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Epoch 3595/4000
6/6 [==============================] - 0s 220us/sample - loss: 0.0
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Epoch 3596/4000
6/6 [==============================] - 0s 255us/sample - loss: 0.0
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Epoch 3597/4000
6/6 [==============================] - 0s 221us/sample - loss: 0.0
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Epoch 3598/4000
6/6 [==============================] - 0s 241us/sample - loss: 0.0
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Epoch 3599/4000
6/6 [==============================] - 0s 258us/sample - loss: 0.0
666
Epoch 3600/4000
6/6 [==============================] - 0s 311us/sample - loss: 0.0
666
Epoch 3601/4000
6/6 [==============================] - 0s 271us/sample - loss: 0.0
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Epoch 3602/4000
6/6 [==============================] - 0s 224us/sample - loss: 0.0
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Epoch 3603/4000
6/6 [==============================] - 0s 214us/sample - loss: 0.0
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Epoch 3604/4000
6/6 [==============================] - 0s 206us/sample - loss: 0.0
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Epoch 3605/4000
6/6 [==============================] - 0s 220us/sample - loss: 0.0
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Epoch 3606/4000
6/6 [==============================] - 0s 264us/sample - loss: 0.0
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Epoch 3607/4000
6/6 [==============================] - 0s 255us/sample - loss: 0.0
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Epoch 3608/4000
6/6 [==============================] - 0s 229us/sample - loss: 0.0
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Epoch 3609/4000
6/6 [==============================] - 0s 231us/sample - loss: 0.0
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Epoch 3610/4000
6/6 [==============================] - 0s 250us/sample - loss: 0.0
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Epoch 3611/4000
6/6 [==============================] - 0s 206us/sample - loss: 0.0
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Epoch 3612/4000
6/6 [==============================] - 0s 234us/sample - loss: 0.0
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Epoch 3613/4000
6/6 [==============================] - 0s 199us/sample - loss: 0.0
666
Epoch 3614/4000
6/6 [==============================] - 0s 216us/sample - loss: 0.0
666
Epoch 3615/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
66
Epoch 3616/4000
6/6 [==============================] - 0s 321us/sample - loss: 0.0
666
Epoch 3617/4000
6/6 [==============================] - 0s 245us/sample - loss: 0.0
666
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Epoch 3618/4000
6/6 [==============================] - 0s 226us/sample - loss: 0.0
666
Epoch 3619/4000
6/6 [==============================] - 0s 236us/sample - loss: 0.0
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Epoch 3620/4000
6/6 [==============================] - 0s 247us/sample - loss: 0.0
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Epoch 3621/4000
6/6 [==============================] - 0s 245us/sample - loss: 0.0
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Epoch 3622/4000
6/6 [==============================] - 0s 249us/sample - loss: 0.0
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Epoch 3623/4000
6/6 [==============================] - 0s 285us/sample - loss: 0.0
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Epoch 3624/4000
6/6 [==============================] - 0s 213us/sample - loss: 0.0
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Epoch 3625/4000
6/6 [==============================] - 0s 273us/sample - loss: 0.0
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Epoch 3626/4000
6/6 [==============================] - 0s 244us/sample - loss: 0.0
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Epoch 3627/4000
6/6 [==============================] - 0s 232us/sample - loss: 0.0
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Epoch 3628/4000
6/6 [==============================] - 0s 209us/sample - loss: 0.0
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Epoch 3629/4000
6/6 [==============================] - 0s 238us/sample - loss: 0.0
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Epoch 3630/4000
6/6 [==============================] - 0s 265us/sample - loss: 0.0
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Epoch 3631/4000
6/6 [==============================] - 0s 234us/sample - loss: 0.0
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Epoch 3632/4000
6/6 [==============================] - 0s 262us/sample - loss: 0.0
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Epoch 3633/4000
6/6 [==============================] - 0s 266us/sample - loss: 0.0
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Epoch 3634/4000
6/6 [==============================] - 0s 213us/sample - loss: 0.0
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Epoch 3635/4000
6/6 [==============================] - 0s 273us/sample - loss: 0.0
666
Epoch 3636/4000
6/6 [==============================] - 0s 249us/sample - loss: 0.0
666
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Epoch 3637/4000
6/6 [==============================] - 0s 221us/sample - loss: 0.0
666
Epoch 3638/4000
6/6 [==============================] - 0s 265us/sample - loss: 0.0
666
Epoch 3639/4000
6/6 [==============================] - 0s 237us/sample - loss: 0.0
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Epoch 3640/4000
6/6 [==============================] - 0s 215us/sample - loss: 0.0
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Epoch 3641/4000
6/6 [==============================] - 0s 238us/sample - loss: 0.0
666
Epoch 3642/4000
6/6 [==============================] - 0s 200us/sample - loss: 0.0
666
Epoch 3643/4000
6/6 [==============================] - 0s 279us/sample - loss: 0.0
666
Epoch 3644/4000
6/6 [==============================] - 0s 212us/sample - loss: 0.0
666
Epoch 3645/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
66
Epoch 3646/4000
6/6 [==============================] - 0s 314us/sample - loss: 0.0
666
Epoch 3647/4000
6/6 [==============================] - 0s 219us/sample - loss: 0.0
666
Epoch 3648/4000
6/6 [==============================] - 0s 260us/sample - loss: 0.0
666
Epoch 3649/4000
6/6 [==============================] - 0s 261us/sample - loss: 0.0
666
Epoch 3650/4000
6/6 [==============================] - 0s 212us/sample - loss: 0.0
666
Epoch 3651/4000
6/6 [==============================] - 0s 211us/sample - loss: 0.0
666
Epoch 3652/4000
6/6 [==============================] - 0s 215us/sample - loss: 0.0
666
Epoch 3653/4000
6/6 [==============================] - 0s 271us/sample - loss: 0.0
666
Epoch 3654/4000
6/6 [==============================] - 0s 234us/sample - loss: 0.0
666
Epoch 3655/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
66
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Epoch 3656/4000
6/6 [==============================] - 0s 251us/sample - loss: 0.0
666
Epoch 3657/4000
6/6 [==============================] - 0s 294us/sample - loss: 0.0
666
Epoch 3658/4000
6/6 [==============================] - 0s 229us/sample - loss: 0.0
666
Epoch 3659/4000
6/6 [==============================] - 0s 258us/sample - loss: 0.0
666
Epoch 3660/4000
6/6 [==============================] - 0s 235us/sample - loss: 0.0
666
Epoch 3661/4000
6/6 [==============================] - 0s 220us/sample - loss: 0.0
666
Epoch 3662/4000
6/6 [==============================] - 0s 200us/sample - loss: 0.0
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Epoch 3663/4000
6/6 [==============================] - 0s 241us/sample - loss: 0.0
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Epoch 3664/4000
6/6 [==============================] - 0s 205us/sample - loss: 0.0
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Epoch 3665/4000
6/6 [==============================] - 0s 205us/sample - loss: 0.0
666
Epoch 3666/4000
6/6 [==============================] - 0s 280us/sample - loss: 0.0
666
Epoch 3667/4000
6/6 [==============================] - 0s 231us/sample - loss: 0.0
666
Epoch 3668/4000
6/6 [==============================] - 0s 278us/sample - loss: 0.0
666
Epoch 3669/4000
6/6 [==============================] - 0s 243us/sample - loss: 0.0
666
Epoch 3670/4000
6/6 [==============================] - 0s 215us/sample - loss: 0.0
666
Epoch 3671/4000
6/6 [==============================] - 0s 233us/sample - loss: 0.0
666
Epoch 3672/4000
6/6 [==============================] - 0s 229us/sample - loss: 0.0
666
Epoch 3673/4000
6/6 [==============================] - 0s 247us/sample - loss: 0.0
666
Epoch 3674/4000
6/6 [==============================] - 0s 212us/sample - loss: 0.0
666
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Epoch 3675/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
66
Epoch 3676/4000
6/6 [==============================] - 0s 274us/sample - loss: 0.0
666
Epoch 3677/4000
6/6 [==============================] - 0s 239us/sample - loss: 0.0
666
Epoch 3678/4000
6/6 [==============================] - 0s 274us/sample - loss: 0.0
666
Epoch 3679/4000
6/6 [==============================] - 0s 286us/sample - loss: 0.0
666
Epoch 3680/4000
6/6 [==============================] - 0s 201us/sample - loss: 0.0
666
Epoch 3681/4000
6/6 [==============================] - 0s 215us/sample - loss: 0.0
666
Epoch 3682/4000
6/6 [==============================] - 0s 247us/sample - loss: 0.0
666
Epoch 3683/4000
6/6 [==============================] - 0s 270us/sample - loss: 0.0
666
Epoch 3684/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
66
Epoch 3685/4000
6/6 [==============================] - 0s 235us/sample - loss: 0.0
666
Epoch 3686/4000
6/6 [==============================] - 0s 256us/sample - loss: 0.0
666
Epoch 3687/4000
6/6 [==============================] - 0s 223us/sample - loss: 0.0
666
Epoch 3688/4000
6/6 [==============================] - 0s 221us/sample - loss: 0.0
666
Epoch 3689/4000
6/6 [==============================] - 0s 220us/sample - loss: 0.0
666
Epoch 3690/4000
6/6 [==============================] - 0s 296us/sample - loss: 0.0
666
Epoch 3691/4000
6/6 [==============================] - 0s 213us/sample - loss: 0.0
666
Epoch 3692/4000
6/6 [==============================] - 0s 294us/sample - loss: 0.0
666
Epoch 3693/4000
6/6 [==============================] - 0s 206us/sample - loss: 0.0
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Epoch 3694/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
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Epoch 3695/4000
6/6 [==============================] - 0s 253us/sample - loss: 0.0
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Epoch 3696/4000
6/6 [==============================] - 0s 253us/sample - loss: 0.0
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Epoch 3697/4000
6/6 [==============================] - 0s 231us/sample - loss: 0.0
666
Epoch 3698/4000
6/6 [==============================] - 0s 271us/sample - loss: 0.0
666
Epoch 3699/4000
6/6 [==============================] - 0s 217us/sample - loss: 0.0
666
Epoch 3700/4000
6/6 [==============================] - 0s 235us/sample - loss: 0.0
666
Epoch 3701/4000
6/6 [==============================] - 0s 226us/sample - loss: 0.0
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Epoch 3702/4000
6/6 [==============================] - 0s 239us/sample - loss: 0.0
666
Epoch 3703/4000
6/6 [==============================] - 0s 232us/sample - loss: 0.0
666
Epoch 3704/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
66
Epoch 3705/4000
6/6 [==============================] - 0s 284us/sample - loss: 0.0
666
Epoch 3706/4000
6/6 [==============================] - 0s 231us/sample - loss: 0.0
666
Epoch 3707/4000
6/6 [==============================] - 0s 228us/sample - loss: 0.0
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Epoch 3708/4000
6/6 [==============================] - 0s 210us/sample - loss: 0.0
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Epoch 3709/4000
6/6 [==============================] - 0s 239us/sample - loss: 0.0
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Epoch 3710/4000
6/6 [==============================] - 0s 229us/sample - loss: 0.0
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Epoch 3711/4000
6/6 [==============================] - 0s 224us/sample - loss: 0.0
666
Epoch 3712/4000
6/6 [==============================] - 0s 270us/sample - loss: 0.0
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Epoch 3713/4000
6/6 [==============================] - 0s 272us/sample - loss: 0.0
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Epoch 3714/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
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Epoch 3715/4000
6/6 [==============================] - 0s 270us/sample - loss: 0.0
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Epoch 3716/4000
6/6 [==============================] - 0s 217us/sample - loss: 0.0
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Epoch 3717/4000
6/6 [==============================] - 0s 215us/sample - loss: 0.0
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Epoch 3718/4000
6/6 [==============================] - 0s 206us/sample - loss: 0.0
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Epoch 3719/4000
6/6 [==============================] - 0s 207us/sample - loss: 0.0
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Epoch 3720/4000
6/6 [==============================] - 0s 236us/sample - loss: 0.0
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Epoch 3721/4000
6/6 [==============================] - 0s 281us/sample - loss: 0.0
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Epoch 3722/4000
6/6 [==============================] - 0s 274us/sample - loss: 0.0
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Epoch 3723/4000
6/6 [==============================] - 0s 209us/sample - loss: 0.0
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Epoch 3724/4000
6/6 [==============================] - 0s 208us/sample - loss: 0.0
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Epoch 3725/4000
6/6 [==============================] - 0s 271us/sample - loss: 0.0
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Epoch 3726/4000
6/6 [==============================] - 0s 260us/sample - loss: 0.0
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Epoch 3727/4000
6/6 [==============================] - 0s 252us/sample - loss: 0.0
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Epoch 3728/4000
6/6 [==============================] - 0s 250us/sample - loss: 0.0
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Epoch 3729/4000
6/6 [==============================] - 0s 216us/sample - loss: 0.0
666
Epoch 3730/4000
6/6 [==============================] - 0s 243us/sample - loss: 0.0
666
Epoch 3731/4000
6/6 [==============================] - 0s 219us/sample - loss: 0.0
666
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Epoch 3732/4000
6/6 [==============================] - 0s 214us/sample - loss: 0.0
666
Epoch 3733/4000
6/6 [==============================] - 0s 200us/sample - loss: 0.0
666
Epoch 3734/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
66
Epoch 3735/4000
6/6 [==============================] - 0s 340us/sample - loss: 0.0
666
Epoch 3736/4000
6/6 [==============================] - 0s 272us/sample - loss: 0.0
666
Epoch 3737/4000
6/6 [==============================] - 0s 257us/sample - loss: 0.0
666
Epoch 3738/4000
6/6 [==============================] - 0s 236us/sample - loss: 0.0
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Epoch 3739/4000
6/6 [==============================] - 0s 277us/sample - loss: 0.0
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Epoch 3740/4000
6/6 [==============================] - 0s 224us/sample - loss: 0.0
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Epoch 3741/4000
6/6 [==============================] - 0s 212us/sample - loss: 0.0
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Epoch 3742/4000
6/6 [==============================] - 0s 223us/sample - loss: 0.0
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Epoch 3743/4000
6/6 [==============================] - 0s 244us/sample - loss: 0.0
666
Epoch 3744/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
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Epoch 3745/4000
6/6 [==============================] - 0s 251us/sample - loss: 0.0
666
Epoch 3746/4000
6/6 [==============================] - 0s 292us/sample - loss: 0.0
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Epoch 3747/4000
6/6 [==============================] - 0s 234us/sample - loss: 0.0
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Epoch 3748/4000
6/6 [==============================] - 0s 271us/sample - loss: 0.0
666
Epoch 3749/4000
6/6 [==============================] - 0s 232us/sample - loss: 0.0
666
Epoch 3750/4000
6/6 [==============================] - 0s 202us/sample - loss: 0.0
666
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Epoch 3751/4000
6/6 [==============================] - 0s 202us/sample - loss: 0.0
666
Epoch 3752/4000
6/6 [==============================] - 0s 218us/sample - loss: 0.0
666
Epoch 3753/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
66
Epoch 3754/4000
6/6 [==============================] - 0s 239us/sample - loss: 0.0
666
Epoch 3755/4000
6/6 [==============================] - 0s 245us/sample - loss: 0.0
666
Epoch 3756/4000
6/6 [==============================] - 0s 239us/sample - loss: 0.0
666
Epoch 3757/4000
6/6 [==============================] - 0s 300us/sample - loss: 0.0
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Epoch 3758/4000
6/6 [==============================] - 0s 234us/sample - loss: 0.0
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Epoch 3759/4000
6/6 [==============================] - 0s 215us/sample - loss: 0.0
666
Epoch 3760/4000
6/6 [==============================] - 0s 215us/sample - loss: 0.0
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Epoch 3761/4000
6/6 [==============================] - 0s 208us/sample - loss: 0.0
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Epoch 3762/4000
6/6 [==============================] - 0s 280us/sample - loss: 0.0
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Epoch 3763/4000
6/6 [==============================] - 0s 204us/sample - loss: 0.0
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Epoch 3764/4000
6/6 [==============================] - 0s 340us/sample - loss: 0.0
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Epoch 3765/4000
6/6 [==============================] - 0s 324us/sample - loss: 0.0
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Epoch 3766/4000
6/6 [==============================] - 0s 313us/sample - loss: 0.0
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Epoch 3767/4000
6/6 [==============================] - 0s 269us/sample - loss: 0.0
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Epoch 3768/4000
6/6 [==============================] - 0s 213us/sample - loss: 0.0
666
Epoch 3769/4000
6/6 [==============================] - 0s 257us/sample - loss: 0.0
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Epoch 3770/4000
6/6 [==============================] - 0s 288us/sample - loss: 0.0
666
Epoch 3771/4000
6/6 [==============================] - 0s 268us/sample - loss: 0.0
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Epoch 3772/4000
6/6 [==============================] - 0s 269us/sample - loss: 0.0
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Epoch 3773/4000
6/6 [==============================] - 0s 423us/sample - loss: 0.0
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Epoch 3774/4000
6/6 [==============================] - 0s 259us/sample - loss: 0.0
666
Epoch 3775/4000
6/6 [==============================] - 0s 237us/sample - loss: 0.0
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Epoch 3776/4000
6/6 [==============================] - 0s 231us/sample - loss: 0.0
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Epoch 3777/4000
6/6 [==============================] - 0s 206us/sample - loss: 0.0
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Epoch 3778/4000
6/6 [==============================] - 0s 251us/sample - loss: 0.0
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Epoch 3779/4000
6/6 [==============================] - 0s 206us/sample - loss: 0.0
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Epoch 3780/4000
6/6 [==============================] - 0s 241us/sample - loss: 0.0
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Epoch 3781/4000
6/6 [==============================] - 0s 232us/sample - loss: 0.0
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Epoch 3782/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
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Epoch 3783/4000
6/6 [==============================] - 0s 247us/sample - loss: 0.0
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Epoch 3784/4000
6/6 [==============================] - 0s 221us/sample - loss: 0.0
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Epoch 3785/4000
6/6 [==============================] - 0s 267us/sample - loss: 0.0
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Epoch 3786/4000
6/6 [==============================] - 0s 302us/sample - loss: 0.0
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Epoch 3787/4000
6/6 [==============================] - 0s 245us/sample - loss: 0.0
666
Epoch 3788/4000
6/6 [==============================] - 0s 212us/sample - loss: 0.0
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Epoch 3789/4000
6/6 [==============================] - 0s 201us/sample - loss: 0.0
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Epoch 3790/4000
6/6 [==============================] - 0s 197us/sample - loss: 0.0
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Epoch 3791/4000
6/6 [==============================] - 0s 194us/sample - loss: 0.0
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Epoch 3792/4000
6/6 [==============================] - 0s 199us/sample - loss: 0.0
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Epoch 3793/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
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Epoch 3794/4000
6/6 [==============================] - 0s 230us/sample - loss: 0.0
666
Epoch 3795/4000
6/6 [==============================] - 0s 251us/sample - loss: 0.0
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Epoch 3796/4000
6/6 [==============================] - 0s 260us/sample - loss: 0.0
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Epoch 3797/4000
6/6 [==============================] - 0s 228us/sample - loss: 0.0
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Epoch 3798/4000
6/6 [==============================] - 0s 212us/sample - loss: 0.0
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Epoch 3799/4000
6/6 [==============================] - 0s 242us/sample - loss: 0.0
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Epoch 3800/4000
6/6 [==============================] - 0s 242us/sample - loss: 0.0
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Epoch 3801/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
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Epoch 3802/4000
6/6 [==============================] - 0s 272us/sample - loss: 0.0
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Epoch 3803/4000
6/6 [==============================] - 0s 220us/sample - loss: 0.0
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Epoch 3804/4000
6/6 [==============================] - 0s 258us/sample - loss: 0.0
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Epoch 3805/4000
6/6 [==============================] - 0s 202us/sample - loss: 0.0
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Epoch 3806/4000
6/6 [==============================] - 0s 191us/sample - loss: 0.0
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Epoch 3807/4000
6/6 [==============================] - 0s 240us/sample - loss: 0.0
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Epoch 3808/4000
6/6 [==============================] - 0s 226us/sample - loss: 0.0
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Epoch 3809/4000
6/6 [==============================] - 0s 249us/sample - loss: 0.0
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Epoch 3810/4000
6/6 [==============================] - 0s 220us/sample - loss: 0.0
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Epoch 3811/4000
6/6 [==============================] - 0s 197us/sample - loss: 0.0
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Epoch 3812/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
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Epoch 3813/4000
6/6 [==============================] - 0s 293us/sample - loss: 0.0
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Epoch 3814/4000
6/6 [==============================] - 0s 252us/sample - loss: 0.0
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Epoch 3815/4000
6/6 [==============================] - 0s 262us/sample - loss: 0.0
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Epoch 3816/4000
6/6 [==============================] - 0s 225us/sample - loss: 0.0
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Epoch 3817/4000
6/6 [==============================] - 0s 250us/sample - loss: 0.0
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Epoch 3818/4000
6/6 [==============================] - 0s 220us/sample - loss: 0.0
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Epoch 3819/4000
6/6 [==============================] - 0s 202us/sample - loss: 0.0
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Epoch 3820/4000
6/6 [==============================] - 0s 269us/sample - loss: 0.0
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Epoch 3821/4000
6/6 [==============================] - 0s 231us/sample - loss: 0.0
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Epoch 3822/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
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Epoch 3823/4000
6/6 [==============================] - 0s 223us/sample - loss: 0.0
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Epoch 3824/4000
6/6 [==============================] - 0s 257us/sample - loss: 0.0
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Epoch 3825/4000
6/6 [==============================] - 0s 219us/sample - loss: 0.0
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Epoch 3826/4000
6/6 [==============================] - 0s 216us/sample - loss: 0.0
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Epoch 3827/4000
6/6 [==============================] - 0s 204us/sample - loss: 0.0
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Epoch 3828/4000
6/6 [==============================] - 0s 254us/sample - loss: 0.0
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Epoch 3829/4000
6/6 [==============================] - 0s 248us/sample - loss: 0.0
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Epoch 3830/4000
6/6 [==============================] - 0s 245us/sample - loss: 0.0
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Epoch 3831/4000
6/6 [==============================] - 0s 239us/sample - loss: 0.0
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Epoch 3832/4000
6/6 [==============================] - 0s 290us/sample - loss: 0.0
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Epoch 3833/4000
6/6 [==============================] - 0s 247us/sample - loss: 0.0
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Epoch 3834/4000
6/6 [==============================] - 0s 212us/sample - loss: 0.0
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Epoch 3835/4000
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Epoch 3836/4000
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Epoch 3837/4000
6/6 [==============================] - 0s 238us/sample - loss: 0.0
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Epoch 3838/4000
6/6 [==============================] - 0s 221us/sample - loss: 0.0
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Epoch 3839/4000
6/6 [==============================] - 0s 204us/sample - loss: 0.0
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Epoch 3840/4000
6/6 [==============================] - 0s 282us/sample - loss: 0.0
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Epoch 3841/4000
6/6 [==============================] - 0s 234us/sample - loss: 0.0
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Epoch 3842/4000
6/6 [==============================] - 0s 210us/sample - loss: 0.0
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Epoch 3843/4000
6/6 [==============================] - 0s 261us/sample - loss: 0.0
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Epoch 3844/4000
6/6 [==============================] - 0s 223us/sample - loss: 0.0
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Epoch 3845/4000
6/6 [==============================] - 0s 202us/sample - loss: 0.0
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Epoch 3846/4000
6/6 [==============================] - 0s 249us/sample - loss: 0.0
666
Epoch 3847/4000
6/6 [==============================] - 0s 250us/sample - loss: 0.0
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Epoch 3848/4000
6/6 [==============================] - 0s 206us/sample - loss: 0.0
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Epoch 3849/4000
6/6 [==============================] - 0s 209us/sample - loss: 0.0
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Epoch 3850/4000
6/6 [==============================] - 0s 204us/sample - loss: 0.0
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Epoch 3851/4000
6/6 [==============================] - 0s 205us/sample - loss: 0.0
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Epoch 3852/4000
6/6 [==============================] - 0s 302us/sample - loss: 0.0
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Epoch 3853/4000
6/6 [==============================] - 0s 313us/sample - loss: 0.0
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Epoch 3854/4000
6/6 [==============================] - 0s 231us/sample - loss: 0.0
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Epoch 3855/4000
6/6 [==============================] - 0s 245us/sample - loss: 0.0
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Epoch 3856/4000
6/6 [==============================] - 0s 203us/sample - loss: 0.0
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Epoch 3857/4000
6/6 [==============================] - 0s 238us/sample - loss: 0.0
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Epoch 3858/4000
6/6 [==============================] - 0s 244us/sample - loss: 0.0
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Epoch 3859/4000
6/6 [==============================] - 0s 213us/sample - loss: 0.0
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Epoch 3860/4000
6/6 [==============================] - 0s 199us/sample - loss: 0.0
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Epoch 3861/4000
6/6 [==============================] - 0s 233us/sample - loss: 0.0
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Epoch 3862/4000
6/6 [==============================] - 0s 13ms/sample - loss: 0.06
66
Epoch 3863/4000
6/6 [==============================] - 0s 243us/sample - loss: 0.0
666
Epoch 3864/4000
6/6 [==============================] - 0s 226us/sample - loss: 0.0
666
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Epoch 3865/4000
6/6 [==============================] - 0s 229us/sample - loss: 0.0
666
Epoch 3866/4000
6/6 [==============================] - 0s 223us/sample - loss: 0.0
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Epoch 3867/4000
6/6 [==============================] - 0s 275us/sample - loss: 0.0
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Epoch 3868/4000
6/6 [==============================] - 0s 272us/sample - loss: 0.0
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Epoch 3869/4000
6/6 [==============================] - 0s 253us/sample - loss: 0.0
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Epoch 3870/4000
6/6 [==============================] - 0s 264us/sample - loss: 0.0
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Epoch 3871/4000
6/6 [==============================] - 0s 192us/sample - loss: 0.0
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Epoch 3872/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
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Epoch 3873/4000
6/6 [==============================] - 0s 249us/sample - loss: 0.0
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Epoch 3874/4000
6/6 [==============================] - 0s 261us/sample - loss: 0.0
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Epoch 3875/4000
6/6 [==============================] - 0s 246us/sample - loss: 0.0
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Epoch 3876/4000
6/6 [==============================] - 0s 262us/sample - loss: 0.0
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Epoch 3877/4000
6/6 [==============================] - 0s 248us/sample - loss: 0.0
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Epoch 3878/4000
6/6 [==============================] - 0s 195us/sample - loss: 0.0
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Epoch 3879/4000
6/6 [==============================] - 0s 229us/sample - loss: 0.0
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Epoch 3880/4000
6/6 [==============================] - 0s 218us/sample - loss: 0.0
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Epoch 3881/4000
6/6 [==============================] - 0s 237us/sample - loss: 0.0
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Epoch 3882/4000
6/6 [==============================] - 0s 204us/sample - loss: 0.0
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Epoch 3883/4000
6/6 [==============================] - 0s 247us/sample - loss: 0.0
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Epoch 3884/4000
6/6 [==============================] - 0s 235us/sample - loss: 0.0
666
Epoch 3885/4000
6/6 [==============================] - 0s 206us/sample - loss: 0.0
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Epoch 3886/4000
6/6 [==============================] - 0s 258us/sample - loss: 0.0
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Epoch 3887/4000
6/6 [==============================] - 0s 204us/sample - loss: 0.0
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Epoch 3888/4000
6/6 [==============================] - 0s 247us/sample - loss: 0.0
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Epoch 3889/4000
6/6 [==============================] - 0s 250us/sample - loss: 0.0
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Epoch 3890/4000
6/6 [==============================] - 0s 195us/sample - loss: 0.0
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Epoch 3891/4000
6/6 [==============================] - 0s 226us/sample - loss: 0.0
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Epoch 3892/4000
6/6 [==============================] - 0s 192us/sample - loss: 0.0
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Epoch 3893/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
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Epoch 3894/4000
6/6 [==============================] - 0s 248us/sample - loss: 0.0
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Epoch 3895/4000
6/6 [==============================] - 0s 224us/sample - loss: 0.0
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Epoch 3896/4000
6/6 [==============================] - 0s 233us/sample - loss: 0.0
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Epoch 3897/4000
6/6 [==============================] - 0s 214us/sample - loss: 0.0
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Epoch 3898/4000
6/6 [==============================] - 0s 216us/sample - loss: 0.0
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Epoch 3899/4000
6/6 [==============================] - 0s 227us/sample - loss: 0.0
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Epoch 3900/4000
6/6 [==============================] - 0s 240us/sample - loss: 0.0
666
Epoch 3901/4000
6/6 [==============================] - 0s 198us/sample - loss: 0.0
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Epoch 3902/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
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Epoch 3903/4000
6/6 [==============================] - 0s 241us/sample - loss: 0.0
666
Epoch 3904/4000
6/6 [==============================] - 0s 242us/sample - loss: 0.0
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Epoch 3905/4000
6/6 [==============================] - 0s 231us/sample - loss: 0.0
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Epoch 3906/4000
6/6 [==============================] - 0s 274us/sample - loss: 0.0
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Epoch 3907/4000
6/6 [==============================] - 0s 253us/sample - loss: 0.0
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Epoch 3908/4000
6/6 [==============================] - 0s 231us/sample - loss: 0.0
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Epoch 3909/4000
6/6 [==============================] - 0s 227us/sample - loss: 0.0
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Epoch 3910/4000
6/6 [==============================] - 0s 198us/sample - loss: 0.0
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Epoch 3911/4000
6/6 [==============================] - 0s 210us/sample - loss: 0.0
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Epoch 3912/4000
6/6 [==============================] - 0s 205us/sample - loss: 0.0
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Epoch 3913/4000
6/6 [==============================] - 0s 306us/sample - loss: 0.0
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Epoch 3914/4000
6/6 [==============================] - 0s 264us/sample - loss: 0.0
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Epoch 3915/4000
6/6 [==============================] - 0s 295us/sample - loss: 0.0
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Epoch 3916/4000
6/6 [==============================] - 0s 211us/sample - loss: 0.0
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Epoch 3917/4000
6/6 [==============================] - 0s 223us/sample - loss: 0.0
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Epoch 3918/4000
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Epoch 3919/4000
6/6 [==============================] - 0s 250us/sample - loss: 0.0
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Epoch 3920/4000
6/6 [==============================] - 0s 241us/sample - loss: 0.0
666
Epoch 3921/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
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Epoch 3922/4000
6/6 [==============================] - 0s 249us/sample - loss: 0.0
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Epoch 3923/4000
6/6 [==============================] - 0s 218us/sample - loss: 0.0
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Epoch 3924/4000
6/6 [==============================] - 0s 232us/sample - loss: 0.0
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Epoch 3925/4000
6/6 [==============================] - 0s 213us/sample - loss: 0.0
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Epoch 3926/4000
6/6 [==============================] - 0s 207us/sample - loss: 0.0
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Epoch 3927/4000
6/6 [==============================] - 0s 277us/sample - loss: 0.0
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Epoch 3928/4000
6/6 [==============================] - 0s 223us/sample - loss: 0.0
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Epoch 3929/4000
6/6 [==============================] - 0s 232us/sample - loss: 0.0
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Epoch 3930/4000
6/6 [==============================] - 0s 211us/sample - loss: 0.0
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Epoch 3931/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
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Epoch 3932/4000
6/6 [==============================] - 0s 314us/sample - loss: 0.0
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Epoch 3933/4000
6/6 [==============================] - 0s 289us/sample - loss: 0.0
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Epoch 3934/4000
6/6 [==============================] - 0s 245us/sample - loss: 0.0
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Epoch 3935/4000
6/6 [==============================] - 0s 246us/sample - loss: 0.0
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Epoch 3936/4000
6/6 [==============================] - 0s 253us/sample - loss: 0.0
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Epoch 3937/4000
6/6 [==============================] - 0s 233us/sample - loss: 0.0
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Epoch 3938/4000
6/6 [==============================] - 0s 206us/sample - loss: 0.0
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Epoch 3939/4000
6/6 [==============================] - 0s 195us/sample - loss: 0.0
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Epoch 3940/4000
6/6 [==============================] - 0s 200us/sample - loss: 0.0
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Epoch 3941/4000
6/6 [==============================] - 0s 196us/sample - loss: 0.0
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Epoch 3942/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
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Epoch 3943/4000
6/6 [==============================] - 0s 225us/sample - loss: 0.0
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Epoch 3944/4000
6/6 [==============================] - 0s 209us/sample - loss: 0.0
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Epoch 3945/4000
6/6 [==============================] - 0s 225us/sample - loss: 0.0
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Epoch 3946/4000
6/6 [==============================] - 0s 219us/sample - loss: 0.0
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Epoch 3947/4000
6/6 [==============================] - 0s 193us/sample - loss: 0.0
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Epoch 3948/4000
6/6 [==============================] - 0s 218us/sample - loss: 0.0
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Epoch 3949/4000
6/6 [==============================] - 0s 203us/sample - loss: 0.0
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Epoch 3950/4000
6/6 [==============================] - 0s 206us/sample - loss: 0.0
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Epoch 3951/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
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Epoch 3952/4000
6/6 [==============================] - 0s 250us/sample - loss: 0.0
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Epoch 3953/4000
6/6 [==============================] - 0s 245us/sample - loss: 0.0
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Epoch 3954/4000
6/6 [==============================] - 0s 277us/sample - loss: 0.0
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Epoch 3955/4000
6/6 [==============================] - 0s 231us/sample - loss: 0.0
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Epoch 3956/4000
6/6 [==============================] - 0s 213us/sample - loss: 0.0
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Epoch 3957/4000
6/6 [==============================] - 0s 237us/sample - loss: 0.0
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Epoch 3958/4000
6/6 [==============================] - 0s 226us/sample - loss: 0.0
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Epoch 3959/4000
6/6 [==============================] - 0s 244us/sample - loss: 0.0
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Epoch 3960/4000
6/6 [==============================] - 0s 263us/sample - loss: 0.0
666
Epoch 3961/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
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Epoch 3962/4000
6/6 [==============================] - 0s 279us/sample - loss: 0.0
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Epoch 3963/4000
6/6 [==============================] - 0s 233us/sample - loss: 0.0
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Epoch 3964/4000
6/6 [==============================] - 0s 233us/sample - loss: 0.0
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Epoch 3965/4000
6/6 [==============================] - 0s 283us/sample - loss: 0.0
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Epoch 3966/4000
6/6 [==============================] - 0s 245us/sample - loss: 0.0
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Epoch 3967/4000
6/6 [==============================] - 0s 225us/sample - loss: 0.0
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Epoch 3968/4000
6/6 [==============================] - 0s 208us/sample - loss: 0.0
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Epoch 3969/4000
6/6 [==============================] - 0s 243us/sample - loss: 0.0
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Epoch 3970/4000
6/6 [==============================] - 0s 232us/sample - loss: 0.0
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Epoch 3971/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
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Epoch 3972/4000
6/6 [==============================] - 0s 257us/sample - loss: 0.0
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Epoch 3973/4000
6/6 [==============================] - 0s 228us/sample - loss: 0.0
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Epoch 3974/4000
6/6 [==============================] - 0s 216us/sample - loss: 0.0
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Epoch 3975/4000
6/6 [==============================] - 0s 253us/sample - loss: 0.0
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Epoch 3976/4000
6/6 [==============================] - 0s 193us/sample - loss: 0.0
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Epoch 3977/4000
6/6 [==============================] - 0s 240us/sample - loss: 0.0
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Epoch 3978/4000
6/6 [==============================] - 0s 240us/sample - loss: 0.0
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Epoch 3979/4000
6/6 [==============================] - 0s 206us/sample - loss: 0.0
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Epoch 3980/4000
6/6 [==============================] - 0s 237us/sample - loss: 0.0
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Epoch 3981/4000
6/6 [==============================] - 0s 191us/sample - loss: 0.0
666
Epoch 3982/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
66
Epoch 3983/4000
6/6 [==============================] - 0s 263us/sample - loss: 0.0
666
Epoch 3984/4000
6/6 [==============================] - 0s 222us/sample - loss: 0.0
666
Epoch 3985/4000
6/6 [==============================] - 0s 221us/sample - loss: 0.0
666
Epoch 3986/4000
6/6 [==============================] - 0s 208us/sample - loss: 0.0
666
Epoch 3987/4000
6/6 [==============================] - 0s 249us/sample - loss: 0.0
666
Epoch 3988/4000
6/6 [==============================] - 0s 217us/sample - loss: 0.0
666
Epoch 3989/4000
6/6 [==============================] - 0s 223us/sample - loss: 0.0
666
Epoch 3990/4000
6/6 [==============================] - 0s 232us/sample - loss: 0.0
666
Epoch 3991/4000
6/6 [==============================] - 0s 203us/sample - loss: 0.0
666
Epoch 3992/4000
6/6 [==============================] - 0s 198us/sample - loss: 0.0
666
Epoch 3993/4000
6/6 [==============================] - 0s 14ms/sample - loss: 0.06
66
Epoch 3994/4000
6/6 [==============================] - 0s 223us/sample - loss: 0.0
666
Epoch 3995/4000
6/6 [==============================] - 0s 261us/sample - loss: 0.0
666
Epoch 3996/4000
6/6 [==============================] - 0s 223us/sample - loss: 0.0
666
Epoch 3997/4000
6/6 [==============================] - 0s 201us/sample - loss: 0.0
666
```

```
Epoch 3998/4000
6/6 [==============================] - 0s 198us/sample - loss: 0.0
666
Epoch 3999/4000
6/6 [==============================] - 0s 203us/sample - loss: 0.0
666
Epoch 4000/4000
6/6 [==============================] - 0s 227us/sample - loss: 0.0
666
[4.]
```

In [ ]:
```
# Now click the 'Submit Assignment' button above.
# Once that is complete, please run the following two cells to save
your work and close the notebook
```

In [ ]:
```
%%javascript
<!-- Save the notebook -->
IPython.notebook.save_checkpoint();
```

In [ ]:
```
%%javascript
IPython.notebook.session.delete();
window.onbeforeunload = null
setTimeout(function() { window.close(); }, 1000);
```