

EECE680C Neural Networks & Deep Learning

Homework 1

Due: Thursday, March 4, 2021

1. Python & Tensorflow programming. Following the neural network for the XOR problem, please implement a neural network to realize the following classification. Note that there are three inputs (x1, x2, x3) and one output (y). Please be sure to get near 100% accuracy. Please plot the learning curve which shows the decreasing of the loss function with respect to the training iterations.

Please put your code and the results into a pdf file and upload to blackboard.

X1	X2	X3	Output y
0	0	1	1
0	1	0	1
0	1	1	0
1	0	0	1
1	0	1	0
1	1	0	0
1	1	1	1

Solution.

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# Exercise 3.4 of EECE680C Lecture 03
# implement 2-layer ANN to learn the XOR problem
# This program needs Tensorflow 2.*, not 1.*

import numpy as np
import tensorflow as tf
import matplotlib.pyplot as plt

# Step 1. define training data
X = np.array([[0., 0., 1.], [0., 1., 0.], [0., 1., 1.], [1., 0., 0.], [1.,
0., 1.], [1., 1., 0.], [1., 1., 1.]]) # input training array X
Y = np.array([[1.], [1.], [0.], [1.], [0.], [0.], [1.]]) # output training
array Y

# Step 2. define DNN model
model = tf.keras.models.Sequential([
    tf.keras.layers.Dense(2, activation='relu'),
    tf.keras.layers.Dense(1)
])
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# Step 3. Define loss and training parameters
predictions = model(X).numpy()
print(predictions)

loss_fn = tf.keras.losses.MeanSquaredError()
print(loss_fn(Y, predictions).numpy())

model.compile(optimizer='adam', loss=loss_fn, metrics=['accuracy'])

# Step 4. Train
history = model.fit(X, Y, epochs=1000)
print(history.history.keys())

# Step 5. Plot loss learning curve
plt.plot(history.history['loss'])
plt.title('Learning Curve')
plt.ylabel('Error')
plt.xlabel('Epochs')
plt.show()

# Step 6. Plot accuracy curve
plt.plot(history.history['accuracy'])
plt.title('Accuracy Curve')
plt.ylabel('Accuracy')
plt.xlabel('Epochs')
plt.show()

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[[0.6901367 ]
 [0.      ]
 [0.29242557]
 [0.24851817]
 [0.9386549 ]
 [0.      ]
 [0.54094374]]
0.40543693
Epoch 1/1000
1/1 [=====] - 0s 1ms/step - loss: 0.4054 - accuracy: 0.5714
Epoch 2/1000
1/1 [=====] - 0s 0s/step - loss: 0.4047 - accuracy: 0.5714
Epoch 3/1000
1/1 [=====] - 0s 0s/step - loss: 0.4039 - accuracy: 0.5714
Epoch 4/1000
1/1 [=====] - 0s 0s/step - loss: 0.4032 - accuracy: 0.5714

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Epoch 5/1000

1/1 [=====] - 0s 0s/step - loss: 0.4024 - accuracy: 0.5714

Epoch 6/1000

1/1 [=====] - 0s 998us/step - loss: 0.4017 - accuracy: 0.5714

Epoch 7/1000

1/1 [=====] - 0s 0s/step - loss: 0.4009 - accuracy: 0.5714

Epoch 8/1000

1/1 [=====] - 0s 0s/step - loss: 0.4002 - accuracy: 0.5714

Epoch 9/1000

1/1 [=====] - 0s 0s/step - loss: 0.3995 - accuracy: 0.5714

Epoch 10/1000

1/1 [=====] - 0s 0s/step - loss: 0.3987 - accuracy: 0.5714

Epoch 11/1000

1/1 [=====] - 0s 0s/step - loss: 0.3980 - accuracy: 0.5714

Epoch 12/1000

1/1 [=====] - 0s 958us/step - loss: 0.3973 - accuracy: 0.5714

Epoch 13/1000

1/1 [=====] - 0s 0s/step - loss: 0.3966 - accuracy: 0.5714

Epoch 14/1000

1/1 [=====] - 0s 0s/step - loss: 0.3959 - accuracy: 0.5714

Epoch 15/1000

1/1 [=====] - 0s 0s/step - loss: 0.3952 - accuracy: 0.5714

Epoch 16/1000

1/1 [=====] - 0s 958us/step - loss: 0.3945 - accuracy: 0.5714

Epoch 17/1000

1/1 [=====] - 0s 0s/step - loss: 0.3939 - accuracy: 0.5714

Epoch 18/1000

1/1 [=====] - 0s 0s/step - loss: 0.3932 - accuracy: 0.5714

Epoch 19/1000

1/1 [=====] - 0s 955us/step - loss: 0.3925 - accuracy: 0.5714

Epoch 20/1000

1/1 [=====] - 0s 0s/step - loss: 0.3918 - accuracy: 0.5714

Epoch 21/1000

1/1 [=====] - 0s 0s/step - loss: 0.3912 - accuracy: 0.5714

Epoch 22/1000

1/1 [=====] - 0s 0s/step - loss: 0.3905 - accuracy: 0.5714

Epoch 23/1000

1/1 [=====] - 0s 0s/step - loss: 0.3899 - accuracy: 0.5714

Epoch 24/1000

1/1 [=====] - 0s 0s/step - loss: 0.3892 - accuracy: 0.5714

Epoch 25/1000

1/1 [=====] - 0s 0s/step - loss: 0.3886 - accuracy: 0.5714

Epoch 26/1000

1/1 [=====] - 0s 953us/step - loss: 0.3879 - accuracy: 0.5714

Epoch 27/1000

1/1 [=====] - 0s 0s/step - loss: 0.3873 - accuracy: 0.5714

Epoch 28/1000

1/1 [=====] - 0s 0s/step - loss: 0.3867 - accuracy: 0.5714

Epoch 29/1000

1/1 [=====] - 0s 958us/step - loss: 0.3860 - accuracy: 0.5714

Epoch 30/1000

1/1 [=====] - 0s 0s/step - loss: 0.3854 - accuracy: 0.5714

Epoch 31/1000

1/1 [=====] - 0s 0s/step - loss: 0.3848 - accuracy: 0.5714

Epoch 32/1000

1/1 [=====] - 0s 957us/step - loss: 0.3842 - accuracy: 0.5714

Epoch 33/1000

1/1 [=====] - 0s 0s/step - loss: 0.3836 - accuracy: 0.5714

Epoch 34/1000

1/1 [=====] - 0s 0s/step - loss: 0.3830 - accuracy: 0.5714

Epoch 35/1000

1/1 [=====] - 0s 0s/step - loss: 0.3824 - accuracy: 0.5714

Epoch 36/1000

1/1 [=====] - 0s 0s/step - loss: 0.3818 - accuracy: 0.5714

Epoch 37/1000

1/1 [=====] - 0s 0s/step - loss: 0.3812 - accuracy: 0.5714

Epoch 38/1000

1/1 [=====] - 0s 958us/step - loss: 0.3806 - accuracy: 0.5714

Epoch 39/1000

1/1 [=====] - 0s 0s/step - loss: 0.3800 - accuracy: 0.5714

Epoch 40/1000

1/1 [=====] - 0s 0s/step - loss: 0.3795 - accuracy: 0.5714

Epoch 41/1000

1/1 [=====] - 0s 0s/step - loss: 0.3789 - accuracy: 0.5714

Epoch 42/1000

1/1 [=====] - 0s 0s/step - loss: 0.3783 - accuracy: 0.5714

Epoch 43/1000

1/1 [=====] - 0s 0s/step - loss: 0.3777 - accuracy: 0.5714

Epoch 44/1000

1/1 [=====] - 0s 997us/step - loss: 0.3772 - accuracy: 0.5714

Epoch 45/1000

1/1 [=====] - 0s 0s/step - loss: 0.3766 - accuracy: 0.5714

Epoch 46/1000

1/1 [=====] - 0s 0s/step - loss: 0.3760 - accuracy: 0.5714

Epoch 47/1000

1/1 [=====] - 0s 0s/step - loss: 0.3755 - accuracy: 0.5714

Epoch 48/1000

1/1 [=====] - 0s 958us/step - loss: 0.3749 - accuracy: 0.5714

Epoch 49/1000

1/1 [=====] - 0s 0s/step - loss: 0.3744 - accuracy: 0.5714

Epoch 50/1000

1/1 [=====] - 0s 0s/step - loss: 0.3738 - accuracy: 0.5714

Epoch 51/1000

1/1 [=====] - 0s 0s/step - loss: 0.3733 - accuracy: 0.5714

Epoch 52/1000

1/1 [=====] - 0s 958us/step - loss: 0.3727 - accuracy: 0.5714

Epoch 53/1000

1/1 [=====] - 0s 0s/step - loss: 0.3722 - accuracy: 0.5714

Epoch 54/1000

1/1 [=====] - 0s 0s/step - loss: 0.3716 - accuracy: 0.5714

Epoch 55/1000

1/1 [=====] - 0s 1ms/step - loss: 0.3711 - accuracy: 0.5714

Epoch 56/1000

1/1 [=====] - 0s 0s/step - loss: 0.3706 - accuracy: 0.5714

Epoch 57/1000

1/1 [=====] - 0s 0s/step - loss: 0.3700 - accuracy: 0.5714

Epoch 58/1000

1/1 [=====] - 0s 0s/step - loss: 0.3695 - accuracy: 0.5714

Epoch 59/1000

1/1 [=====] - 0s 958us/step - loss: 0.3690 - accuracy: 0.5714

Epoch 60/1000

1/1 [=====] - 0s 0s/step - loss: 0.3685 - accuracy: 0.5714

Epoch 61/1000

1/1 [=====] - 0s 0s/step - loss: 0.3679 - accuracy: 0.5714

Epoch 62/1000

1/1 [=====] - 0s 0s/step - loss: 0.3674 - accuracy: 0.5714

Epoch 63/1000

1/1 [=====] - 0s 0s/step - loss: 0.3669 - accuracy: 0.5714

Epoch 64/1000

1/1 [=====] - 0s 0s/step - loss: 0.3664 - accuracy: 0.5714

Epoch 65/1000

1/1 [=====] - 0s 0s/step - loss: 0.3659 - accuracy: 0.5714

Epoch 66/1000

1/1 [=====] - 0s 0s/step - loss: 0.3654 - accuracy: 0.5714

Epoch 67/1000

1/1 [=====] - 0s 0s/step - loss: 0.3649 - accuracy: 0.5714

Epoch 68/1000

1/1 [=====] - 0s 0s/step - loss: 0.3644 - accuracy: 0.5714

Epoch 69/1000

1/1 [=====] - 0s 956us/step - loss: 0.3638 - accuracy: 0.5714

Epoch 70/1000

1/1 [=====] - 0s 0s/step - loss: 0.3633 - accuracy: 0.5714

Epoch 71/1000

1/1 [=====] - 0s 0s/step - loss: 0.3628 - accuracy: 0.5714

Epoch 72/1000

1/1 [=====] - 0s 958us/step - loss: 0.3623 - accuracy: 0.5714

Epoch 73/1000

1/1 [=====] - 0s 0s/step - loss: 0.3619 - accuracy: 0.5714

Epoch 74/1000

1/1 [=====] - 0s 0s/step - loss: 0.3614 - accuracy: 0.5714

Epoch 75/1000

1/1 [=====] - 0s 957us/step - loss: 0.3609 - accuracy: 0.5714

Epoch 76/1000

1/1 [=====] - 0s 0s/step - loss: 0.3604 - accuracy: 0.5714

Epoch 77/1000

1/1 [=====] - 0s 0s/step - loss: 0.3599 - accuracy: 0.5714

Epoch 78/1000

1/1 [=====] - 0s 0s/step - loss: 0.3594 - accuracy: 0.5714

Epoch 79/1000

1/1 [=====] - 0s 0s/step - loss: 0.3589 - accuracy: 0.5714

Epoch 80/1000

1/1 [=====] - 0s 0s/step - loss: 0.3584 - accuracy: 0.5714

Epoch 81/1000

1/1 [=====] - 0s 0s/step - loss: 0.3580 - accuracy: 0.5714

Epoch 82/1000

1/1 [=====] - 0s 0s/step - loss: 0.3575 - accuracy: 0.5714

Epoch 83/1000

1/1 [=====] - 0s 957us/step - loss: 0.3570 - accuracy: 0.5714

Epoch 84/1000

1/1 [=====] - 0s 0s/step - loss: 0.3565 - accuracy: 0.5714

Epoch 85/1000

1/1 [=====] - 0s 0s/step - loss: 0.3561 - accuracy: 0.5714

Epoch 86/1000

1/1 [=====] - 0s 958us/step - loss: 0.3556 - accuracy: 0.5714

Epoch 87/1000

1/1 [=====] - 0s 0s/step - loss: 0.3551 - accuracy: 0.5714

Epoch 88/1000

1/1 [=====] - 0s 0s/step - loss: 0.3547 - accuracy: 0.5714

Epoch 89/1000

1/1 [=====] - 0s 958us/step - loss: 0.3542 - accuracy: 0.5714

Epoch 90/1000

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Epoch 91/1000

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Epoch 92/1000

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Epoch 93/1000

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Epoch 94/1000

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Epoch 95/1000

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Epoch 96/1000

1/1 [=====] - 0s 0s/step - loss: 0.3510 - accuracy: 0.5714

Epoch 97/1000

1/1 [=====] - 0s 0s/step - loss: 0.3506 - accuracy: 0.5714

Epoch 98/1000

1/1 [=====] - 0s 0s/step - loss: 0.3501 - accuracy: 0.5714

Epoch 99/1000

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Epoch 100/1000

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Epoch 101/1000

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Epoch 102/1000

1/1 [=====] - 0s 0s/step - loss: 0.3484 - accuracy: 0.5714

Epoch 103/1000

1/1 [=====] - 0s 0s/step - loss: 0.3480 - accuracy: 0.5714

Epoch 104/1000

1/1 [=====] - 0s 0s/step - loss: 0.3475 - accuracy: 0.5714

Epoch 105/1000

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Epoch 106/1000

1/1 [=====] - 0s 0s/step - loss: 0.3467 - accuracy: 0.5714

Epoch 107/1000

1/1 [=====] - 0s 0s/step - loss: 0.3462 - accuracy: 0.5714

Epoch 108/1000

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Epoch 109/1000

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Epoch 110/1000

1/1 [=====] - 0s 0s/step - loss: 0.3450 - accuracy: 0.5714

Epoch 111/1000

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Epoch 112/1000

1/1 [=====] - 0s 0s/step - loss: 0.3441 - accuracy: 0.5714

Epoch 113/1000

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Epoch 114/1000

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Epoch 115/1000

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Epoch 116/1000

1/1 [=====] - 0s 0s/step - loss: 0.3425 - accuracy: 0.5714

Epoch 117/1000

1/1 [=====] - 0s 0s/step - loss: 0.3421 - accuracy: 0.5714

Epoch 118/1000

1/1 [=====] - 0s 0s/step - loss: 0.3417 - accuracy: 0.5714

Epoch 119/1000

1/1 [=====] - 0s 0s/step - loss: 0.3413 - accuracy: 0.5714

Epoch 120/1000

1/1 [=====] - 0s 0s/step - loss: 0.3409 - accuracy: 0.5714

Epoch 121/1000

1/1 [=====] - 0s 0s/step - loss: 0.3405 - accuracy: 0.5714

Epoch 122/1000

1/1 [=====] - 0s 0s/step - loss: 0.3401 - accuracy: 0.5714

Epoch 123/1000

1/1 [=====] - 0s 0s/step - loss: 0.3397 - accuracy: 0.5714

Epoch 124/1000

1/1 [=====] - 0s 0s/step - loss: 0.3393 - accuracy: 0.5714

Epoch 125/1000

1/1 [=====] - 0s 0s/step - loss: 0.3389 - accuracy: 0.5714

Epoch 126/1000

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Epoch 127/1000

1/1 [=====] - 0s 0s/step - loss: 0.3381 - accuracy: 0.5714

Epoch 128/1000

1/1 [=====] - 0s 0s/step - loss: 0.3377 - accuracy: 0.5714

Epoch 129/1000

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Epoch 130/1000

1/1 [=====] - 0s 0s/step - loss: 0.3369 - accuracy: 0.5714

Epoch 131/1000

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Epoch 132/1000

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Epoch 133/1000

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Epoch 134/1000

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Epoch 135/1000

1/1 [=====] - 0s 0s/step - loss: 0.3350 - accuracy: 0.5714

Epoch 136/1000

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Epoch 137/1000

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Epoch 138/1000

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Epoch 139/1000

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Epoch 140/1000

1/1 [=====] - 0s 0s/step - loss: 0.3331 - accuracy: 0.5714

Epoch 141/1000

1/1 [=====] - 0s 0s/step - loss: 0.3327 - accuracy: 0.5714

Epoch 142/1000

1/1 [=====] - 0s 0s/step - loss: 0.3324 - accuracy: 0.5714

Epoch 143/1000

1/1 [=====] - 0s 0s/step - loss: 0.3320 - accuracy: 0.5714

Epoch 144/1000

1/1 [=====] - 0s 0s/step - loss: 0.3316 - accuracy: 0.5714

Epoch 145/1000

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Epoch 146/1000

1/1 [=====] - 0s 0s/step - loss: 0.3309 - accuracy: 0.5714

Epoch 147/1000

1/1 [=====] - 0s 0s/step - loss: 0.3305 - accuracy: 0.5714

Epoch 148/1000

1/1 [=====] - 0s 0s/step - loss: 0.3302 - accuracy: 0.5714

Epoch 149/1000

1/1 [=====] - 0s 0s/step - loss: 0.3298 - accuracy: 0.5714

Epoch 150/1000

1/1 [=====] - 0s 0s/step - loss: 0.3295 - accuracy: 0.5714

Epoch 151/1000

1/1 [=====] - 0s 0s/step - loss: 0.3291 - accuracy: 0.5714

Epoch 152/1000

1/1 [=====] - 0s 998us/step - loss: 0.3287 - accuracy: 0.5714

Epoch 153/1000

1/1 [=====] - 0s 0s/step - loss: 0.3284 - accuracy: 0.5714

Epoch 154/1000

1/1 [=====] - 0s 0s/step - loss: 0.3280 - accuracy: 0.5714

Epoch 155/1000

1/1 [=====] - 0s 0s/step - loss: 0.3277 - accuracy: 0.5714

Epoch 156/1000

1/1 [=====] - 0s 997us/step - loss: 0.3273 - accuracy: 0.5714

Epoch 157/1000

1/1 [=====] - 0s 0s/step - loss: 0.3270 - accuracy: 0.5714

Epoch 158/1000

1/1 [=====] - 0s 0s/step - loss: 0.3266 - accuracy: 0.5714

Epoch 159/1000

1/1 [=====] - 0s 0s/step - loss: 0.3263 - accuracy: 0.5714

Epoch 160/1000

1/1 [=====] - 0s 0s/step - loss: 0.3259 - accuracy: 0.5714

Epoch 161/1000

1/1 [=====] - 0s 0s/step - loss: 0.3256 - accuracy: 0.5714

Epoch 162/1000

1/1 [=====] - 0s 0s/step - loss: 0.3252 - accuracy: 0.5714

Epoch 163/1000

1/1 [=====] - 0s 997us/step - loss: 0.3249 - accuracy: 0.5714

Epoch 164/1000

1/1 [=====] - 0s 0s/step - loss: 0.3246 - accuracy: 0.5714

Epoch 165/1000

1/1 [=====] - 0s 998us/step - loss: 0.3242 - accuracy: 0.5714

Epoch 166/1000

1/1 [=====] - 0s 0s/step - loss: 0.3239 - accuracy: 0.5714

Epoch 167/1000

1/1 [=====] - 0s 0s/step - loss: 0.3235 - accuracy: 0.5714

Epoch 168/1000

1/1 [=====] - 0s 0s/step - loss: 0.3232 - accuracy: 0.5714

Epoch 169/1000

1/1 [=====] - 0s 0s/step - loss: 0.3229 - accuracy: 0.5714

Epoch 170/1000

1/1 [=====] - 0s 0s/step - loss: 0.3225 - accuracy: 0.5714

Epoch 171/1000

1/1 [=====] - 0s 0s/step - loss: 0.3222 - accuracy: 0.5714

Epoch 172/1000

1/1 [=====] - 0s 0s/step - loss: 0.3219 - accuracy: 0.5714

Epoch 173/1000

1/1 [=====] - 0s 0s/step - loss: 0.3215 - accuracy: 0.5714

Epoch 174/1000

1/1 [=====] - 0s 0s/step - loss: 0.3212 - accuracy: 0.5714

Epoch 175/1000

1/1 [=====] - 0s 0s/step - loss: 0.3209 - accuracy: 0.5714

Epoch 176/1000

1/1 [=====] - 0s 0s/step - loss: 0.3205 - accuracy: 0.5714

Epoch 177/1000

1/1 [=====] - 0s 0s/step - loss: 0.3202 - accuracy: 0.5714

Epoch 178/1000

1/1 [=====] - 0s 0s/step - loss: 0.3199 - accuracy: 0.5714

Epoch 179/1000

1/1 [=====] - 0s 0s/step - loss: 0.3196 - accuracy: 0.5714

Epoch 180/1000

1/1 [=====] - 0s 0s/step - loss: 0.3192 - accuracy: 0.5714

Epoch 181/1000

1/1 [=====] - 0s 0s/step - loss: 0.3189 - accuracy: 0.5714

Epoch 182/1000

1/1 [=====] - 0s 997us/step - loss: 0.3186 - accuracy: 0.5714

Epoch 183/1000

1/1 [=====] - 0s 0s/step - loss: 0.3183 - accuracy: 0.5714

Epoch 184/1000

1/1 [=====] - 0s 0s/step - loss: 0.3180 - accuracy: 0.5714

Epoch 185/1000

1/1 [=====] - 0s 0s/step - loss: 0.3176 - accuracy: 0.5714

Epoch 186/1000

1/1 [=====] - 0s 0s/step - loss: 0.3173 - accuracy: 0.5714

Epoch 187/1000

1/1 [=====] - 0s 0s/step - loss: 0.3170 - accuracy: 0.5714

Epoch 188/1000

1/1 [=====] - 0s 0s/step - loss: 0.3167 - accuracy: 0.5714

Epoch 189/1000

1/1 [=====] - 0s 0s/step - loss: 0.3164 - accuracy: 0.5714

Epoch 190/1000

1/1 [=====] - 0s 0s/step - loss: 0.3161 - accuracy: 0.5714

Epoch 191/1000

1/1 [=====] - 0s 959us/step - loss: 0.3158 - accuracy: 0.5714

Epoch 192/1000

1/1 [=====] - 0s 0s/step - loss: 0.3155 - accuracy: 0.5714

Epoch 193/1000

1/1 [=====] - 0s 0s/step - loss: 0.3151 - accuracy: 0.5714

Epoch 194/1000

1/1 [=====] - 0s 995us/step - loss: 0.3148 - accuracy: 0.5714

Epoch 195/1000

1/1 [=====] - 0s 0s/step - loss: 0.3145 - accuracy: 0.5714

Epoch 196/1000

1/1 [=====] - 0s 0s/step - loss: 0.3142 - accuracy: 0.5714

Epoch 197/1000

1/1 [=====] - 0s 0s/step - loss: 0.3139 - accuracy: 0.5714

Epoch 198/1000

1/1 [=====] - 0s 0s/step - loss: 0.3136 - accuracy: 0.5714

Epoch 199/1000

1/1 [=====] - 0s 0s/step - loss: 0.3133 - accuracy: 0.5714

Epoch 200/1000

1/1 [=====] - 0s 0s/step - loss: 0.3130 - accuracy: 0.5714

Epoch 201/1000

1/1 [=====] - 0s 999us/step - loss: 0.3127 - accuracy: 0.5714

Epoch 202/1000

1/1 [=====] - 0s 0s/step - loss: 0.3124 - accuracy: 0.5714

Epoch 203/1000

1/1 [=====] - 0s 0s/step - loss: 0.3121 - accuracy: 0.5714

Epoch 204/1000

1/1 [=====] - 0s 0s/step - loss: 0.3118 - accuracy: 0.5714

Epoch 205/1000

1/1 [=====] - 0s 0s/step - loss: 0.3115 - accuracy: 0.5714

Epoch 206/1000

1/1 [=====] - 0s 0s/step - loss: 0.3112 - accuracy: 0.5714

Epoch 207/1000

1/1 [=====] - 0s 0s/step - loss: 0.3109 - accuracy: 0.5714

Epoch 208/1000

1/1 [=====] - 0s 0s/step - loss: 0.3107 - accuracy: 0.5714

Epoch 209/1000

1/1 [=====] - 0s 0s/step - loss: 0.3104 - accuracy: 0.5714

Epoch 210/1000

1/1 [=====] - 0s 958us/step - loss: 0.3101 - accuracy: 0.5714

Epoch 211/1000

1/1 [=====] - 0s 998us/step - loss: 0.3098 - accuracy: 0.5714

Epoch 212/1000

1/1 [=====] - 0s 0s/step - loss: 0.3095 - accuracy: 0.5714

Epoch 213/1000

1/1 [=====] - 0s 0s/step - loss: 0.3092 - accuracy: 0.5714

Epoch 214/1000

1/1 [=====] - 0s 1ms/step - loss: 0.3089 - accuracy: 0.5714

Epoch 215/1000

1/1 [=====] - 0s 0s/step - loss: 0.3086 - accuracy: 0.5714

Epoch 216/1000

1/1 [=====] - 0s 0s/step - loss: 0.3084 - accuracy: 0.5714

Epoch 217/1000

1/1 [=====] - 0s 0s/step - loss: 0.3081 - accuracy: 0.5714

Epoch 218/1000

1/1 [=====] - 0s 0s/step - loss: 0.3078 - accuracy: 0.5714

Epoch 219/1000

1/1 [=====] - 0s 995us/step - loss: 0.3075 - accuracy: 0.5714

Epoch 220/1000

1/1 [=====] - 0s 0s/step - loss: 0.3072 - accuracy: 0.5714

Epoch 221/1000

1/1 [=====] - 0s 956us/step - loss: 0.3070 - accuracy: 0.5714

Epoch 222/1000

1/1 [=====] - 0s 0s/step - loss: 0.3067 - accuracy: 0.5714

Epoch 223/1000

1/1 [=====] - 0s 0s/step - loss: 0.3064 - accuracy: 0.5714

Epoch 224/1000

1/1 [=====] - 0s 0s/step - loss: 0.3061 - accuracy: 0.5714

Epoch 225/1000

1/1 [=====] - 0s 952us/step - loss: 0.3059 - accuracy: 0.5714

Epoch 226/1000

1/1 [=====] - 0s 0s/step - loss: 0.3056 - accuracy: 0.5714

Epoch 227/1000

1/1 [=====] - 0s 0s/step - loss: 0.3053 - accuracy: 0.5714

Epoch 228/1000

1/1 [=====] - 0s 0s/step - loss: 0.3050 - accuracy: 0.5714

Epoch 229/1000

1/1 [=====] - 0s 0s/step - loss: 0.3048 - accuracy: 0.5714

Epoch 230/1000

1/1 [=====] - 0s 0s/step - loss: 0.3045 - accuracy: 0.5714

Epoch 231/1000

1/1 [=====] - 0s 0s/step - loss: 0.3042 - accuracy: 0.5714

Epoch 232/1000

1/1 [=====] - 0s 0s/step - loss: 0.3040 - accuracy: 0.5714

Epoch 233/1000

1/1 [=====] - 0s 0s/step - loss: 0.3037 - accuracy: 0.5714

Epoch 234/1000

1/1 [=====] - 0s 0s/step - loss: 0.3034 - accuracy: 0.5714

Epoch 235/1000

1/1 [=====] - 0s 0s/step - loss: 0.3032 - accuracy: 0.5714

Epoch 236/1000

1/1 [=====] - 0s 0s/step - loss: 0.3029 - accuracy: 0.5714

Epoch 237/1000

1/1 [=====] - 0s 0s/step - loss: 0.3026 - accuracy: 0.5714

Epoch 238/1000

1/1 [=====] - 0s 0s/step - loss: 0.3024 - accuracy: 0.5714

Epoch 239/1000

1/1 [=====] - 0s 0s/step - loss: 0.3021 - accuracy: 0.5714

Epoch 240/1000

1/1 [=====] - 0s 0s/step - loss: 0.3019 - accuracy: 0.5714

Epoch 241/1000

1/1 [=====] - 0s 956us/step - loss: 0.3016 - accuracy: 0.5714

Epoch 242/1000

1/1 [=====] - 0s 0s/step - loss: 0.3013 - accuracy: 0.5714

Epoch 243/1000

1/1 [=====] - 0s 0s/step - loss: 0.3011 - accuracy: 0.5714

Epoch 244/1000

1/1 [=====] - 0s 0s/step - loss: 0.3008 - accuracy: 0.5714

Epoch 245/1000

1/1 [=====] - 0s 0s/step - loss: 0.3006 - accuracy: 0.5714

Epoch 246/1000

1/1 [=====] - 0s 0s/step - loss: 0.3003 - accuracy: 0.5714

Epoch 247/1000

1/1 [=====] - 0s 0s/step - loss: 0.3001 - accuracy: 0.5714

Epoch 248/1000

1/1 [=====] - 0s 0s/step - loss: 0.2998 - accuracy: 0.5714

Epoch 249/1000

1/1 [=====] - 0s 0s/step - loss: 0.2996 - accuracy: 0.5714

Epoch 250/1000

1/1 [=====] - 0s 0s/step - loss: 0.2993 - accuracy: 0.5714

Epoch 251/1000

1/1 [=====] - 0s 0s/step - loss: 0.2991 - accuracy: 0.5714

Epoch 252/1000

1/1 [=====] - 0s 0s/step - loss: 0.2988 - accuracy: 0.5714

Epoch 253/1000

1/1 [=====] - 0s 0s/step - loss: 0.2986 - accuracy: 0.5714

Epoch 254/1000

1/1 [=====] - 0s 0s/step - loss: 0.2983 - accuracy: 0.5714

Epoch 255/1000

1/1 [=====] - 0s 0s/step - loss: 0.2981 - accuracy: 0.5714

Epoch 256/1000

1/1 [=====] - 0s 0s/step - loss: 0.2978 - accuracy: 0.5714

Epoch 257/1000

1/1 [=====] - 0s 0s/step - loss: 0.2976 - accuracy: 0.5714

Epoch 258/1000

1/1 [=====] - 0s 0s/step - loss: 0.2973 - accuracy: 0.5714

Epoch 259/1000

1/1 [=====] - 0s 0s/step - loss: 0.2971 - accuracy: 0.5714

Epoch 260/1000

1/1 [=====] - 0s 0s/step - loss: 0.2969 - accuracy: 0.5714

Epoch 261/1000

1/1 [=====] - 0s 0s/step - loss: 0.2966 - accuracy: 0.5714

Epoch 262/1000

1/1 [=====] - 0s 0s/step - loss: 0.2964 - accuracy: 0.5714

Epoch 263/1000

1/1 [=====] - 0s 0s/step - loss: 0.2961 - accuracy: 0.5714

Epoch 264/1000

1/1 [=====] - 0s 0s/step - loss: 0.2959 - accuracy: 0.5714

Epoch 265/1000

1/1 [=====] - 0s 0s/step - loss: 0.2957 - accuracy: 0.5714

Epoch 266/1000

1/1 [=====] - 0s 0s/step - loss: 0.2954 - accuracy: 0.5714

Epoch 267/1000

1/1 [=====] - 0s 0s/step - loss: 0.2952 - accuracy: 0.5714

Epoch 268/1000

1/1 [=====] - 0s 0s/step - loss: 0.2950 - accuracy: 0.5714

Epoch 269/1000

1/1 [=====] - 0s 0s/step - loss: 0.2947 - accuracy: 0.5714

Epoch 270/1000

1/1 [=====] - 0s 0s/step - loss: 0.2945 - accuracy: 0.5714

Epoch 271/1000

1/1 [=====] - 0s 0s/step - loss: 0.2943 - accuracy: 0.7143

Epoch 272/1000

1/1 [=====] - 0s 0s/step - loss: 0.2940 - accuracy: 0.7143

Epoch 273/1000

1/1 [=====] - 0s 0s/step - loss: 0.2938 - accuracy: 0.7143

Epoch 274/1000

1/1 [=====] - 0s 0s/step - loss: 0.2936 - accuracy: 0.7143

Epoch 275/1000

1/1 [=====] - 0s 0s/step - loss: 0.2933 - accuracy: 0.7143

Epoch 276/1000

1/1 [=====] - 0s 0s/step - loss: 0.2931 - accuracy: 0.7143

Epoch 277/1000

1/1 [=====] - 0s 0s/step - loss: 0.2929 - accuracy: 0.7143

Epoch 278/1000

1/1 [=====] - 0s 0s/step - loss: 0.2927 - accuracy: 0.7143

Epoch 279/1000

1/1 [=====] - 0s 958us/step - loss: 0.2924 - accuracy: 0.7143

Epoch 280/1000

1/1 [=====] - 0s 0s/step - loss: 0.2922 - accuracy: 0.7143

Epoch 281/1000

1/1 [=====] - 0s 0s/step - loss: 0.2920 - accuracy: 0.7143

Epoch 282/1000

1/1 [=====] - 0s 0s/step - loss: 0.2918 - accuracy: 0.7143

Epoch 283/1000

1/1 [=====] - 0s 0s/step - loss: 0.2915 - accuracy: 0.7143

Epoch 284/1000

1/1 [=====] - 0s 954us/step - loss: 0.2913 - accuracy: 0.7143

Epoch 285/1000

1/1 [=====] - 0s 0s/step - loss: 0.2911 - accuracy: 0.7143

Epoch 286/1000

1/1 [=====] - 0s 997us/step - loss: 0.2909 - accuracy: 0.7143

Epoch 287/1000

1/1 [=====] - 0s 0s/step - loss: 0.2907 - accuracy: 0.7143

Epoch 288/1000

1/1 [=====] - 0s 0s/step - loss: 0.2905 - accuracy: 0.7143

Epoch 289/1000

1/1 [=====] - 0s 0s/step - loss: 0.2902 - accuracy: 0.7143

Epoch 290/1000

1/1 [=====] - 0s 998us/step - loss: 0.2900 - accuracy: 0.7143

Epoch 291/1000

1/1 [=====] - 0s 0s/step - loss: 0.2898 - accuracy: 0.7143

Epoch 292/1000

1/1 [=====] - 0s 0s/step - loss: 0.2896 - accuracy: 0.7143

Epoch 293/1000

1/1 [=====] - 0s 0s/step - loss: 0.2894 - accuracy: 0.7143

Epoch 294/1000

1/1 [=====] - 0s 0s/step - loss: 0.2892 - accuracy: 0.7143

Epoch 295/1000

1/1 [=====] - 0s 958us/step - loss: 0.2889 - accuracy: 0.7143

Epoch 296/1000

1/1 [=====] - 0s 0s/step - loss: 0.2888 - accuracy: 0.7143

Epoch 297/1000

1/1 [=====] - 0s 0s/step - loss: 0.2885 - accuracy: 0.7143

Epoch 298/1000

1/1 [=====] - 0s 0s/step - loss: 0.2883 - accuracy: 0.7143

Epoch 299/1000

1/1 [=====] - 0s 0s/step - loss: 0.2881 - accuracy: 0.7143

Epoch 300/1000

1/1 [=====] - 0s 0s/step - loss: 0.2879 - accuracy: 0.7143

Epoch 301/1000

1/1 [=====] - 0s 958us/step - loss: 0.2877 - accuracy: 0.7143

Epoch 302/1000

1/1 [=====] - 0s 0s/step - loss: 0.2875 - accuracy: 0.7143

Epoch 303/1000

1/1 [=====] - 0s 0s/step - loss: 0.2873 - accuracy: 0.7143

Epoch 304/1000

1/1 [=====] - 0s 958us/step - loss: 0.2871 - accuracy: 0.7143

Epoch 305/1000

1/1 [=====] - 0s 958us/step - loss: 0.2869 - accuracy: 0.7143

Epoch 306/1000

1/1 [=====] - 0s 0s/step - loss: 0.2867 - accuracy: 0.7143

Epoch 307/1000

1/1 [=====] - 0s 0s/step - loss: 0.2865 - accuracy: 0.7143

Epoch 308/1000

1/1 [=====] - 0s 0s/step - loss: 0.2863 - accuracy: 0.7143

Epoch 309/1000

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Epoch 310/1000

1/1 [=====] - 0s 0s/step - loss: 0.2859 - accuracy: 0.7143

Epoch 311/1000

1/1 [=====] - 0s 0s/step - loss: 0.2857 - accuracy: 0.7143

Epoch 312/1000

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Epoch 313/1000

1/1 [=====] - 0s 0s/step - loss: 0.2853 - accuracy: 0.7143

Epoch 314/1000

1/1 [=====] - 0s 998us/step - loss: 0.2851 - accuracy: 0.7143

Epoch 315/1000

1/1 [=====] - 0s 0s/step - loss: 0.2849 - accuracy: 0.7143

Epoch 316/1000

1/1 [=====] - 0s 0s/step - loss: 0.2847 - accuracy: 0.7143

Epoch 317/1000

1/1 [=====] - 0s 0s/step - loss: 0.2845 - accuracy: 0.7143

Epoch 318/1000

1/1 [=====] - 0s 0s/step - loss: 0.2843 - accuracy: 0.7143

Epoch 319/1000

1/1 [=====] - 0s 0s/step - loss: 0.2841 - accuracy: 0.7143

Epoch 320/1000

1/1 [=====] - 0s 0s/step - loss: 0.2839 - accuracy: 0.7143

Epoch 321/1000

1/1 [=====] - 0s 0s/step - loss: 0.2837 - accuracy: 0.7143

Epoch 322/1000

1/1 [=====] - 0s 0s/step - loss: 0.2835 - accuracy: 0.7143

Epoch 323/1000

1/1 [=====] - 0s 0s/step - loss: 0.2833 - accuracy: 0.7143

Epoch 324/1000

1/1 [=====] - 0s 0s/step - loss: 0.2832 - accuracy: 0.7143

Epoch 325/1000

1/1 [=====] - 0s 0s/step - loss: 0.2830 - accuracy: 0.7143

Epoch 326/1000

1/1 [=====] - 0s 0s/step - loss: 0.2828 - accuracy: 0.7143

Epoch 327/1000

1/1 [=====] - 0s 0s/step - loss: 0.2826 - accuracy: 0.7143

Epoch 328/1000

1/1 [=====] - 0s 1ms/step - loss: 0.2824 - accuracy: 0.7143

Epoch 329/1000

1/1 [=====] - 0s 0s/step - loss: 0.2822 - accuracy: 0.7143

Epoch 330/1000

1/1 [=====] - 0s 952us/step - loss: 0.2820 - accuracy: 0.7143

Epoch 331/1000

1/1 [=====] - 0s 0s/step - loss: 0.2818 - accuracy: 0.7143

Epoch 332/1000

1/1 [=====] - 0s 0s/step - loss: 0.2817 - accuracy: 0.7143

Epoch 333/1000

1/1 [=====] - 0s 0s/step - loss: 0.2815 - accuracy: 0.7143

Epoch 334/1000

1/1 [=====] - 0s 0s/step - loss: 0.2813 - accuracy: 0.7143

Epoch 335/1000

1/1 [=====] - 0s 996us/step - loss: 0.2811 - accuracy: 0.7143

Epoch 336/1000

1/1 [=====] - 0s 958us/step - loss: 0.2809 - accuracy: 0.7143

Epoch 337/1000

1/1 [=====] - 0s 0s/step - loss: 0.2808 - accuracy: 0.7143

Epoch 338/1000

1/1 [=====] - 0s 0s/step - loss: 0.2806 - accuracy: 0.7143

Epoch 339/1000

1/1 [=====] - 0s 0s/step - loss: 0.2804 - accuracy: 0.7143

Epoch 340/1000

1/1 [=====] - 0s 0s/step - loss: 0.2802 - accuracy: 0.7143

Epoch 341/1000

1/1 [=====] - 0s 957us/step - loss: 0.2800 - accuracy: 0.7143

Epoch 342/1000

1/1 [=====] - 0s 0s/step - loss: 0.2799 - accuracy: 0.7143

Epoch 343/1000

1/1 [=====] - 0s 0s/step - loss: 0.2797 - accuracy: 0.7143

Epoch 344/1000

1/1 [=====] - 0s 0s/step - loss: 0.2795 - accuracy: 0.7143

Epoch 345/1000

1/1 [=====] - 0s 998us/step - loss: 0.2793 - accuracy: 0.7143

Epoch 346/1000

1/1 [=====] - 0s 0s/step - loss: 0.2792 - accuracy: 0.7143

Epoch 347/1000

1/1 [=====] - 0s 0s/step - loss: 0.2790 - accuracy: 0.7143

Epoch 348/1000

1/1 [=====] - 0s 0s/step - loss: 0.2788 - accuracy: 0.7143

Epoch 349/1000

1/1 [=====] - 0s 0s/step - loss: 0.2787 - accuracy: 0.7143

Epoch 350/1000

1/1 [=====] - 0s 0s/step - loss: 0.2785 - accuracy: 0.7143

Epoch 351/1000

1/1 [=====] - 0s 0s/step - loss: 0.2783 - accuracy: 0.7143

Epoch 352/1000

1/1 [=====] - 0s 0s/step - loss: 0.2782 - accuracy: 0.7143

Epoch 353/1000

1/1 [=====] - 0s 0s/step - loss: 0.2780 - accuracy: 0.7143

Epoch 354/1000

1/1 [=====] - 0s 0s/step - loss: 0.2778 - accuracy: 0.7143

Epoch 355/1000

1/1 [=====] - 0s 955us/step - loss: 0.2776 - accuracy: 0.7143

Epoch 356/1000

1/1 [=====] - 0s 0s/step - loss: 0.2775 - accuracy: 0.7143

Epoch 357/1000

1/1 [=====] - 0s 0s/step - loss: 0.2773 - accuracy: 0.7143

Epoch 358/1000

1/1 [=====] - 0s 0s/step - loss: 0.2771 - accuracy: 0.7143

Epoch 359/1000

1/1 [=====] - 0s 0s/step - loss: 0.2770 - accuracy: 0.7143

Epoch 360/1000

1/1 [=====] - 0s 0s/step - loss: 0.2768 - accuracy: 0.7143

Epoch 361/1000

1/1 [=====] - 0s 0s/step - loss: 0.2766 - accuracy: 0.7143

Epoch 362/1000

1/1 [=====] - 0s 0s/step - loss: 0.2765 - accuracy: 0.7143

Epoch 363/1000

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Epoch 364/1000

1/1 [=====] - 0s 0s/step - loss: 0.2762 - accuracy: 0.7143

Epoch 365/1000

1/1 [=====] - 0s 959us/step - loss: 0.2760 - accuracy: 0.7143

Epoch 366/1000

1/1 [=====] - 0s 0s/step - loss: 0.2758 - accuracy: 0.7143

Epoch 367/1000

1/1 [=====] - 0s 0s/step - loss: 0.2757 - accuracy: 0.7143

Epoch 368/1000

1/1 [=====] - 0s 0s/step - loss: 0.2755 - accuracy: 0.7143

Epoch 369/1000

1/1 [=====] - 0s 0s/step - loss: 0.2754 - accuracy: 0.7143

Epoch 370/1000

1/1 [=====] - 0s 0s/step - loss: 0.2752 - accuracy: 0.7143

Epoch 371/1000

1/1 [=====] - 0s 0s/step - loss: 0.2750 - accuracy: 0.7143

Epoch 372/1000

1/1 [=====] - 0s 0s/step - loss: 0.2749 - accuracy: 0.7143

Epoch 373/1000

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Epoch 374/1000

1/1 [=====] - 0s 0s/step - loss: 0.2746 - accuracy: 0.7143

Epoch 375/1000

1/1 [=====] - 0s 0s/step - loss: 0.2744 - accuracy: 0.7143

Epoch 376/1000

1/1 [=====] - 0s 0s/step - loss: 0.2743 - accuracy: 0.7143

Epoch 377/1000

1/1 [=====] - 0s 955us/step - loss: 0.2741 - accuracy: 0.7143

Epoch 378/1000

1/1 [=====] - 0s 0s/step - loss: 0.2740 - accuracy: 0.7143

Epoch 379/1000

1/1 [=====] - 0s 0s/step - loss: 0.2738 - accuracy: 0.7143

Epoch 380/1000

1/1 [=====] - 0s 0s/step - loss: 0.2736 - accuracy: 0.7143

Epoch 381/1000

1/1 [=====] - 0s 0s/step - loss: 0.2735 - accuracy: 0.7143

Epoch 382/1000

1/1 [=====] - 0s 0s/step - loss: 0.2734 - accuracy: 0.7143

Epoch 383/1000

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Epoch 384/1000

1/1 [=====] - 0s 0s/step - loss: 0.2731 - accuracy: 0.7143

Epoch 385/1000

1/1 [=====] - 0s 0s/step - loss: 0.2729 - accuracy: 0.7143

Epoch 386/1000

1/1 [=====] - 0s 0s/step - loss: 0.2728 - accuracy: 0.7143

Epoch 387/1000

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Epoch 388/1000

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Epoch 389/1000

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Epoch 390/1000

1/1 [=====] - 0s 0s/step - loss: 0.2722 - accuracy: 0.7143

Epoch 391/1000

1/1 [=====] - 0s 0s/step - loss: 0.2720 - accuracy: 0.7143

Epoch 392/1000

1/1 [=====] - 0s 0s/step - loss: 0.2719 - accuracy: 0.7143

Epoch 393/1000

1/1 [=====] - 0s 0s/step - loss: 0.2717 - accuracy: 0.7143

Epoch 394/1000

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Epoch 395/1000

1/1 [=====] - 0s 0s/step - loss: 0.2714 - accuracy: 0.7143

Epoch 396/1000

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Epoch 397/1000

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Epoch 398/1000

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Epoch 399/1000

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Epoch 400/1000

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Epoch 401/1000

1/1 [=====] - 0s 0s/step - loss: 0.2706 - accuracy: 0.7143

Epoch 402/1000

1/1 [=====] - 0s 0s/step - loss: 0.2705 - accuracy: 0.7143

Epoch 403/1000

1/1 [=====] - 0s 0s/step - loss: 0.2703 - accuracy: 0.7143

Epoch 404/1000

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Epoch 405/1000

1/1 [=====] - 0s 0s/step - loss: 0.2700 - accuracy: 0.7143

Epoch 406/1000

1/1 [=====] - 0s 0s/step - loss: 0.2699 - accuracy: 0.7143

Epoch 407/1000

1/1 [=====] - 0s 0s/step - loss: 0.2698 - accuracy: 0.7143

Epoch 408/1000

1/1 [=====] - 0s 0s/step - loss: 0.2696 - accuracy: 0.7143

Epoch 409/1000

1/1 [=====] - 0s 0s/step - loss: 0.2695 - accuracy: 0.7143

Epoch 410/1000

1/1 [=====] - 0s 0s/step - loss: 0.2694 - accuracy: 0.7143

Epoch 411/1000

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Epoch 412/1000

1/1 [=====] - 0s 0s/step - loss: 0.2691 - accuracy: 0.7143

Epoch 413/1000

1/1 [=====] - 0s 0s/step - loss: 0.2690 - accuracy: 0.7143

Epoch 414/1000

1/1 [=====] - 0s 0s/step - loss: 0.2688 - accuracy: 0.7143

Epoch 415/1000

1/1 [=====] - 0s 0s/step - loss: 0.2687 - accuracy: 0.7143

Epoch 416/1000

1/1 [=====] - 0s 0s/step - loss: 0.2686 - accuracy: 0.7143

Epoch 417/1000

1/1 [=====] - 0s 0s/step - loss: 0.2684 - accuracy: 0.7143

Epoch 418/1000

1/1 [=====] - 0s 0s/step - loss: 0.2683 - accuracy: 0.7143

Epoch 419/1000

1/1 [=====] - 0s 957us/step - loss: 0.2682 - accuracy: 0.7143

Epoch 420/1000

1/1 [=====] - 0s 0s/step - loss: 0.2681 - accuracy: 0.7143

Epoch 421/1000

1/1 [=====] - 0s 0s/step - loss: 0.2679 - accuracy: 0.7143

Epoch 422/1000

1/1 [=====] - 0s 0s/step - loss: 0.2678 - accuracy: 0.7143

Epoch 423/1000

1/1 [=====] - 0s 0s/step - loss: 0.2677 - accuracy: 0.7143

Epoch 424/1000

1/1 [=====] - 0s 0s/step - loss: 0.2675 - accuracy: 0.7143

Epoch 425/1000

1/1 [=====] - 0s 957us/step - loss: 0.2674 - accuracy: 0.7143

Epoch 426/1000

1/1 [=====] - 0s 0s/step - loss: 0.2673 - accuracy: 0.7143

Epoch 427/1000

1/1 [=====] - 0s 0s/step - loss: 0.2672 - accuracy: 0.7143

Epoch 428/1000

1/1 [=====] - 0s 0s/step - loss: 0.2670 - accuracy: 0.7143

Epoch 429/1000

1/1 [=====] - 0s 0s/step - loss: 0.2669 - accuracy: 0.7143

Epoch 430/1000

1/1 [=====] - 0s 957us/step - loss: 0.2668 - accuracy: 0.7143

Epoch 431/1000

1/1 [=====] - 0s 0s/step - loss: 0.2667 - accuracy: 0.7143

Epoch 432/1000

1/1 [=====] - 0s 0s/step - loss: 0.2665 - accuracy: 0.7143

Epoch 433/1000

1/1 [=====] - 0s 958us/step - loss: 0.2664 - accuracy: 0.7143

Epoch 434/1000

1/1 [=====] - 0s 0s/step - loss: 0.2663 - accuracy: 0.7143

Epoch 435/1000

1/1 [=====] - 0s 959us/step - loss: 0.2662 - accuracy: 0.7143

Epoch 436/1000

1/1 [=====] - 0s 0s/step - loss: 0.2660 - accuracy: 0.7143

Epoch 437/1000

1/1 [=====] - 0s 958us/step - loss: 0.2659 - accuracy: 0.7143

Epoch 438/1000

1/1 [=====] - 0s 0s/step - loss: 0.2658 - accuracy: 0.7143

Epoch 439/1000

1/1 [=====] - 0s 0s/step - loss: 0.2657 - accuracy: 0.7143

Epoch 440/1000

1/1 [=====] - 0s 0s/step - loss: 0.2656 - accuracy: 0.7143

Epoch 441/1000

1/1 [=====] - 0s 0s/step - loss: 0.2654 - accuracy: 0.7143

Epoch 442/1000

1/1 [=====] - 0s 995us/step - loss: 0.2653 - accuracy: 0.7143

Epoch 443/1000

1/1 [=====] - 0s 0s/step - loss: 0.2652 - accuracy: 0.7143

Epoch 444/1000

1/1 [=====] - 0s 0s/step - loss: 0.2651 - accuracy: 0.7143

Epoch 445/1000

1/1 [=====] - 0s 0s/step - loss: 0.2650 - accuracy: 0.7143

Epoch 446/1000

1/1 [=====] - 0s 0s/step - loss: 0.2649 - accuracy: 0.7143

Epoch 447/1000

1/1 [=====] - 0s 0s/step - loss: 0.2647 - accuracy: 0.7143

Epoch 448/1000

1/1 [=====] - 0s 0s/step - loss: 0.2646 - accuracy: 0.7143

Epoch 449/1000

1/1 [=====] - 0s 0s/step - loss: 0.2645 - accuracy: 0.7143

Epoch 450/1000

1/1 [=====] - 0s 0s/step - loss: 0.2644 - accuracy: 0.7143

Epoch 451/1000

1/1 [=====] - 0s 996us/step - loss: 0.2643 - accuracy: 0.7143

Epoch 452/1000

1/1 [=====] - 0s 1ms/step - loss: 0.2642 - accuracy: 0.7143

Epoch 453/1000

1/1 [=====] - 0s 0s/step - loss: 0.2641 - accuracy: 0.7143

Epoch 454/1000

1/1 [=====] - 0s 0s/step - loss: 0.2639 - accuracy: 0.7143

Epoch 455/1000

1/1 [=====] - 0s 996us/step - loss: 0.2638 - accuracy: 0.7143

Epoch 456/1000

1/1 [=====] - 0s 0s/step - loss: 0.2637 - accuracy: 0.7143

Epoch 457/1000

1/1 [=====] - 0s 0s/step - loss: 0.2636 - accuracy: 0.7143

Epoch 458/1000

1/1 [=====] - 0s 0s/step - loss: 0.2635 - accuracy: 0.7143

Epoch 459/1000

1/1 [=====] - 0s 0s/step - loss: 0.2634 - accuracy: 0.7143

Epoch 460/1000

1/1 [=====] - 0s 0s/step - loss: 0.2633 - accuracy: 0.7143

Epoch 461/1000

1/1 [=====] - 0s 997us/step - loss: 0.2632 - accuracy: 0.7143

Epoch 462/1000

1/1 [=====] - 0s 0s/step - loss: 0.2631 - accuracy: 0.7143

Epoch 463/1000

1/1 [=====] - 0s 999us/step - loss: 0.2630 - accuracy: 0.7143

Epoch 464/1000

1/1 [=====] - 0s 0s/step - loss: 0.2629 - accuracy: 0.7143

Epoch 465/1000

1/1 [=====] - 0s 957us/step - loss: 0.2627 - accuracy: 0.7143

Epoch 466/1000

1/1 [=====] - 0s 999us/step - loss: 0.2626 - accuracy: 0.7143

Epoch 467/1000

1/1 [=====] - 0s 0s/step - loss: 0.2625 - accuracy: 0.7143

Epoch 468/1000

1/1 [=====] - 0s 958us/step - loss: 0.2624 - accuracy: 0.7143

Epoch 469/1000

1/1 [=====] - 0s 0s/step - loss: 0.2623 - accuracy: 0.7143

Epoch 470/1000

1/1 [=====] - 0s 0s/step - loss: 0.2622 - accuracy: 0.7143

Epoch 471/1000

1/1 [=====] - 0s 0s/step - loss: 0.2621 - accuracy: 0.7143

Epoch 472/1000

1/1 [=====] - 0s 0s/step - loss: 0.2620 - accuracy: 0.7143

Epoch 473/1000

1/1 [=====] - 0s 1ms/step - loss: 0.2619 - accuracy: 0.7143

Epoch 474/1000

1/1 [=====] - 0s 0s/step - loss: 0.2618 - accuracy: 0.7143

Epoch 475/1000

1/1 [=====] - 0s 957us/step - loss: 0.2617 - accuracy: 0.7143

Epoch 476/1000

1/1 [=====] - 0s 0s/step - loss: 0.2616 - accuracy: 0.7143

Epoch 477/1000

1/1 [=====] - 0s 1ms/step - loss: 0.2615 - accuracy: 0.7143

Epoch 478/1000

1/1 [=====] - 0s 0s/step - loss: 0.2614 - accuracy: 0.7143

Epoch 479/1000

1/1 [=====] - 0s 0s/step - loss: 0.2613 - accuracy: 0.7143

Epoch 480/1000

1/1 [=====] - 0s 0s/step - loss: 0.2612 - accuracy: 0.7143

Epoch 481/1000

1/1 [=====] - 0s 0s/step - loss: 0.2611 - accuracy: 0.7143

Epoch 482/1000

1/1 [=====] - 0s 0s/step - loss: 0.2610 - accuracy: 0.7143

Epoch 483/1000

1/1 [=====] - 0s 0s/step - loss: 0.2609 - accuracy: 0.7143

Epoch 484/1000

1/1 [=====] - 0s 957us/step - loss: 0.2608 - accuracy: 0.7143

Epoch 485/1000

1/1 [=====] - 0s 982us/step - loss: 0.2607 - accuracy: 0.7143

Epoch 486/1000

1/1 [=====] - 0s 0s/step - loss: 0.2606 - accuracy: 0.7143

Epoch 487/1000

1/1 [=====] - 0s 0s/step - loss: 0.2605 - accuracy: 0.7143

Epoch 488/1000

1/1 [=====] - 0s 0s/step - loss: 0.2604 - accuracy: 0.7143

Epoch 489/1000

1/1 [=====] - 0s 0s/step - loss: 0.2603 - accuracy: 0.7143

Epoch 490/1000

1/1 [=====] - 0s 0s/step - loss: 0.2602 - accuracy: 0.7143

Epoch 491/1000

1/1 [=====] - 0s 0s/step - loss: 0.2601 - accuracy: 0.7143

Epoch 492/1000

1/1 [=====] - 0s 0s/step - loss: 0.2600 - accuracy: 0.7143

Epoch 493/1000

1/1 [=====] - 0s 998us/step - loss: 0.2599 - accuracy: 0.7143

Epoch 494/1000

1/1 [=====] - 0s 0s/step - loss: 0.2598 - accuracy: 0.7143

Epoch 495/1000

1/1 [=====] - 0s 955us/step - loss: 0.2597 - accuracy: 0.7143

Epoch 496/1000

1/1 [=====] - 0s 0s/step - loss: 0.2596 - accuracy: 0.7143

Epoch 497/1000

1/1 [=====] - 0s 0s/step - loss: 0.2595 - accuracy: 0.7143

Epoch 498/1000

1/1 [=====] - 0s 1ms/step - loss: 0.2594 - accuracy: 0.7143

Epoch 499/1000

1/1 [=====] - 0s 0s/step - loss: 0.2593 - accuracy: 0.7143

Epoch 500/1000

1/1 [=====] - 0s 0s/step - loss: 0.2592 - accuracy: 0.7143

Epoch 501/1000

1/1 [=====] - 0s 0s/step - loss: 0.2591 - accuracy: 0.7143

Epoch 502/1000

1/1 [=====] - 0s 0s/step - loss: 0.2591 - accuracy: 0.7143

Epoch 503/1000

1/1 [=====] - 0s 0s/step - loss: 0.2590 - accuracy: 0.7143

Epoch 504/1000

1/1 [=====] - 0s 0s/step - loss: 0.2589 - accuracy: 0.7143

Epoch 505/1000

1/1 [=====] - 0s 957us/step - loss: 0.2588 - accuracy: 0.7143

Epoch 506/1000

1/1 [=====] - 0s 0s/step - loss: 0.2587 - accuracy: 0.7143

Epoch 507/1000

1/1 [=====] - 0s 0s/step - loss: 0.2586 - accuracy: 0.7143

Epoch 508/1000

1/1 [=====] - 0s 0s/step - loss: 0.2585 - accuracy: 0.7143

Epoch 509/1000

1/1 [=====] - 0s 0s/step - loss: 0.2584 - accuracy: 0.7143

Epoch 510/1000

1/1 [=====] - 0s 998us/step - loss: 0.2583 - accuracy: 0.7143

Epoch 511/1000

1/1 [=====] - 0s 0s/step - loss: 0.2582 - accuracy: 0.7143

Epoch 512/1000

1/1 [=====] - 0s 0s/step - loss: 0.2582 - accuracy: 0.7143

Epoch 513/1000

1/1 [=====] - 0s 0s/step - loss: 0.2581 - accuracy: 0.7143

Epoch 514/1000

1/1 [=====] - 0s 998us/step - loss: 0.2580 - accuracy: 0.7143

Epoch 515/1000

1/1 [=====] - 0s 0s/step - loss: 0.2579 - accuracy: 0.7143

Epoch 516/1000

1/1 [=====] - 0s 0s/step - loss: 0.2578 - accuracy: 0.7143

Epoch 517/1000

1/1 [=====] - 0s 0s/step - loss: 0.2577 - accuracy: 0.7143

Epoch 518/1000

1/1 [=====] - 0s 0s/step - loss: 0.2576 - accuracy: 0.7143

Epoch 519/1000

1/1 [=====] - 0s 0s/step - loss: 0.2575 - accuracy: 0.7143

Epoch 520/1000

1/1 [=====] - 0s 0s/step - loss: 0.2575 - accuracy: 0.7143

Epoch 521/1000

1/1 [=====] - 0s 0s/step - loss: 0.2574 - accuracy: 0.7143

Epoch 522/1000

1/1 [=====] - 0s 0s/step - loss: 0.2573 - accuracy: 0.7143

Epoch 523/1000

1/1 [=====] - 0s 0s/step - loss: 0.2572 - accuracy: 0.7143

Epoch 524/1000

1/1 [=====] - 0s 0s/step - loss: 0.2571 - accuracy: 0.7143

Epoch 525/1000

1/1 [=====] - 0s 997us/step - loss: 0.2570 - accuracy: 0.7143

Epoch 526/1000

1/1 [=====] - 0s 0s/step - loss: 0.2570 - accuracy: 0.7143

Epoch 527/1000

1/1 [=====] - 0s 997us/step - loss: 0.2569 - accuracy: 0.7143

Epoch 528/1000

1/1 [=====] - 0s 0s/step - loss: 0.2568 - accuracy: 0.7143

Epoch 529/1000

1/1 [=====] - 0s 0s/step - loss: 0.2567 - accuracy: 0.7143

Epoch 530/1000

1/1 [=====] - 0s 0s/step - loss: 0.2566 - accuracy: 0.7143

Epoch 531/1000

1/1 [=====] - 0s 0s/step - loss: 0.2565 - accuracy: 0.7143

Epoch 532/1000

1/1 [=====] - 0s 0s/step - loss: 0.2565 - accuracy: 0.7143

Epoch 533/1000

1/1 [=====] - 0s 0s/step - loss: 0.2564 - accuracy: 0.7143

Epoch 534/1000

1/1 [=====] - 0s 997us/step - loss: 0.2563 - accuracy: 0.7143

Epoch 535/1000

1/1 [=====] - 0s 0s/step - loss: 0.2562 - accuracy: 0.7143

Epoch 536/1000

1/1 [=====] - 0s 0s/step - loss: 0.2561 - accuracy: 0.7143

Epoch 537/1000

1/1 [=====] - 0s 0s/step - loss: 0.2561 - accuracy: 0.7143

Epoch 538/1000

1/1 [=====] - 0s 0s/step - loss: 0.2560 - accuracy: 0.7143

Epoch 539/1000

1/1 [=====] - 0s 997us/step - loss: 0.2559 - accuracy: 0.7143

Epoch 540/1000

1/1 [=====] - 0s 0s/step - loss: 0.2558 - accuracy: 0.7143

Epoch 541/1000

1/1 [=====] - 0s 998us/step - loss: 0.2557 - accuracy: 0.7143

Epoch 542/1000

1/1 [=====] - 0s 0s/step - loss: 0.2557 - accuracy: 0.7143

Epoch 543/1000

1/1 [=====] - 0s 997us/step - loss: 0.2556 - accuracy: 0.7143

Epoch 544/1000

1/1 [=====] - 0s 0s/step - loss: 0.2555 - accuracy: 0.7143

Epoch 545/1000

1/1 [=====] - 0s 0s/step - loss: 0.2554 - accuracy: 0.7143

Epoch 546/1000

1/1 [=====] - 0s 0s/step - loss: 0.2554 - accuracy: 0.7143

Epoch 547/1000

1/1 [=====] - 0s 0s/step - loss: 0.2553 - accuracy: 0.7143

Epoch 548/1000

1/1 [=====] - 0s 997us/step - loss: 0.2552 - accuracy: 0.7143

Epoch 549/1000

1/1 [=====] - 0s 0s/step - loss: 0.2551 - accuracy: 0.7143

Epoch 550/1000

1/1 [=====] - 0s 997us/step - loss: 0.2551 - accuracy: 0.7143

Epoch 551/1000

1/1 [=====] - 0s 0s/step - loss: 0.2550 - accuracy: 0.7143

Epoch 552/1000

1/1 [=====] - 0s 0s/step - loss: 0.2549 - accuracy: 0.7143

Epoch 553/1000

1/1 [=====] - 0s 998us/step - loss: 0.2548 - accuracy: 0.7143

Epoch 554/1000

1/1 [=====] - 0s 1ms/step - loss: 0.2548 - accuracy: 0.7143

Epoch 555/1000

1/1 [=====] - 0s 0s/step - loss: 0.2547 - accuracy: 0.7143

Epoch 556/1000

1/1 [=====] - 0s 0s/step - loss: 0.2546 - accuracy: 0.7143

Epoch 557/1000

1/1 [=====] - 0s 0s/step - loss: 0.2545 - accuracy: 0.7143

Epoch 558/1000

1/1 [=====] - 0s 0s/step - loss: 0.2545 - accuracy: 0.7143

Epoch 559/1000

1/1 [=====] - 0s 0s/step - loss: 0.2544 - accuracy: 0.7143

Epoch 560/1000

1/1 [=====] - 0s 997us/step - loss: 0.2543 - accuracy: 0.7143

Epoch 561/1000

1/1 [=====] - 0s 0s/step - loss: 0.2542 - accuracy: 0.7143

Epoch 562/1000

1/1 [=====] - 0s 0s/step - loss: 0.2542 - accuracy: 0.7143

Epoch 563/1000

1/1 [=====] - 0s 0s/step - loss: 0.2541 - accuracy: 0.7143

Epoch 564/1000

1/1 [=====] - 0s 997us/step - loss: 0.2540 - accuracy: 0.7143

Epoch 565/1000

1/1 [=====] - 0s 0s/step - loss: 0.2540 - accuracy: 0.7143

Epoch 566/1000

1/1 [=====] - 0s 997us/step - loss: 0.2539 - accuracy: 0.7143

Epoch 567/1000

1/1 [=====] - 0s 0s/step - loss: 0.2538 - accuracy: 0.7143

Epoch 568/1000

1/1 [=====] - 0s 997us/step - loss: 0.2537 - accuracy: 0.7143

Epoch 569/1000

1/1 [=====] - 0s 0s/step - loss: 0.2537 - accuracy: 0.7143

Epoch 570/1000

1/1 [=====] - 0s 0s/step - loss: 0.2536 - accuracy: 0.7143

Epoch 571/1000

1/1 [=====] - 0s 0s/step - loss: 0.2535 - accuracy: 0.7143

Epoch 572/1000

1/1 [=====] - 0s 1000us/step - loss: 0.2535 - accuracy: 0.7143

Epoch 573/1000

1/1 [=====] - 0s 0s/step - loss: 0.2534 - accuracy: 0.7143

Epoch 574/1000

1/1 [=====] - 0s 0s/step - loss: 0.2533 - accuracy: 0.7143

Epoch 575/1000

1/1 [=====] - 0s 998us/step - loss: 0.2533 - accuracy: 0.7143

Epoch 576/1000

1/1 [=====] - 0s 0s/step - loss: 0.2532 - accuracy: 0.7143

Epoch 577/1000

1/1 [=====] - 0s 0s/step - loss: 0.2531 - accuracy: 0.7143

Epoch 578/1000

1/1 [=====] - 0s 0s/step - loss: 0.2531 - accuracy: 0.7143

Epoch 579/1000

1/1 [=====] - 0s 0s/step - loss: 0.2530 - accuracy: 0.7143

Epoch 580/1000

1/1 [=====] - 0s 997us/step - loss: 0.2530 - accuracy: 0.7143

Epoch 581/1000

1/1 [=====] - 0s 0s/step - loss: 0.2529 - accuracy: 0.7143

Epoch 582/1000

1/1 [=====] - 0s 997us/step - loss: 0.2528 - accuracy: 0.7143

Epoch 583/1000

1/1 [=====] - 0s 0s/step - loss: 0.2528 - accuracy: 0.7143

Epoch 584/1000

1/1 [=====] - 0s 989us/step - loss: 0.2527 - accuracy: 0.7143

Epoch 585/1000

1/1 [=====] - 0s 0s/step - loss: 0.2527 - accuracy: 0.7143

Epoch 586/1000

1/1 [=====] - 0s 997us/step - loss: 0.2526 - accuracy: 0.7143

Epoch 587/1000

1/1 [=====] - 0s 0s/step - loss: 0.2526 - accuracy: 0.7143

Epoch 588/1000

1/1 [=====] - 0s 0s/step - loss: 0.2525 - accuracy: 0.7143

Epoch 589/1000

1/1 [=====] - 0s 0s/step - loss: 0.2525 - accuracy: 0.7143

Epoch 590/1000

1/1 [=====] - 0s 996us/step - loss: 0.2524 - accuracy: 0.7143

Epoch 591/1000

1/1 [=====] - 0s 0s/step - loss: 0.2524 - accuracy: 0.7143

Epoch 592/1000

1/1 [=====] - 0s 0s/step - loss: 0.2523 - accuracy: 0.7143

Epoch 593/1000

1/1 [=====] - 0s 0s/step - loss: 0.2522 - accuracy: 0.7143

Epoch 594/1000

1/1 [=====] - 0s 0s/step - loss: 0.2522 - accuracy: 0.7143

Epoch 595/1000

1/1 [=====] - 0s 0s/step - loss: 0.2521 - accuracy: 0.7143

Epoch 596/1000

1/1 [=====] - 0s 0s/step - loss: 0.2521 - accuracy: 0.7143

Epoch 597/1000

1/1 [=====] - 0s 0s/step - loss: 0.2520 - accuracy: 0.7143

Epoch 598/1000

1/1 [=====] - 0s 0s/step - loss: 0.2520 - accuracy: 0.7143

Epoch 599/1000

1/1 [=====] - 0s 0s/step - loss: 0.2519 - accuracy: 0.7143

Epoch 600/1000

1/1 [=====] - 0s 0s/step - loss: 0.2519 - accuracy: 0.7143

Epoch 601/1000

1/1 [=====] - 0s 0s/step - loss: 0.2518 - accuracy: 0.7143

Epoch 602/1000

1/1 [=====] - 0s 0s/step - loss: 0.2518 - accuracy: 0.7143

Epoch 603/1000

1/1 [=====] - 0s 0s/step - loss: 0.2517 - accuracy: 0.7143

Epoch 604/1000

1/1 [=====] - 0s 0s/step - loss: 0.2517 - accuracy: 0.7143

Epoch 605/1000

1/1 [=====] - 0s 996us/step - loss: 0.2517 - accuracy: 0.7143

Epoch 606/1000

1/1 [=====] - 0s 0s/step - loss: 0.2516 - accuracy: 0.7143

Epoch 607/1000

1/1 [=====] - 0s 0s/step - loss: 0.2515 - accuracy: 0.7143

Epoch 608/1000

1/1 [=====] - 0s 0s/step - loss: 0.2515 - accuracy: 0.7143

Epoch 609/1000

1/1 [=====] - 0s 0s/step - loss: 0.2514 - accuracy: 0.7143

Epoch 610/1000

1/1 [=====] - 0s 998us/step - loss: 0.2514 - accuracy: 0.7143

Epoch 611/1000

1/1 [=====] - 0s 0s/step - loss: 0.2513 - accuracy: 0.7143

Epoch 612/1000

1/1 [=====] - 0s 0s/step - loss: 0.2513 - accuracy: 0.7143

Epoch 613/1000

1/1 [=====] - 0s 0s/step - loss: 0.2512 - accuracy: 0.7143

Epoch 614/1000

1/1 [=====] - 0s 0s/step - loss: 0.2512 - accuracy: 0.7143

Epoch 615/1000

1/1 [=====] - 0s 0s/step - loss: 0.2512 - accuracy: 0.7143

Epoch 616/1000

1/1 [=====] - 0s 0s/step - loss: 0.2511 - accuracy: 0.7143

Epoch 617/1000

1/1 [=====] - 0s 0s/step - loss: 0.2510 - accuracy: 0.7143

Epoch 618/1000

1/1 [=====] - 0s 0s/step - loss: 0.2510 - accuracy: 0.7143

Epoch 619/1000

1/1 [=====] - 0s 0s/step - loss: 0.2510 - accuracy: 0.7143

Epoch 620/1000

1/1 [=====] - 0s 0s/step - loss: 0.2509 - accuracy: 0.7143

Epoch 621/1000

1/1 [=====] - 0s 0s/step - loss: 0.2509 - accuracy: 0.7143

Epoch 622/1000

1/1 [=====] - 0s 0s/step - loss: 0.2508 - accuracy: 0.7143

Epoch 623/1000

1/1 [=====] - 0s 0s/step - loss: 0.2508 - accuracy: 0.7143

Epoch 624/1000

1/1 [=====] - 0s 0s/step - loss: 0.2507 - accuracy: 0.7143

Epoch 625/1000

1/1 [=====] - 0s 0s/step - loss: 0.2507 - accuracy: 0.7143

Epoch 626/1000

1/1 [=====] - 0s 0s/step - loss: 0.2506 - accuracy: 0.7143

Epoch 627/1000

1/1 [=====] - 0s 0s/step - loss: 0.2506 - accuracy: 0.7143

Epoch 628/1000

1/1 [=====] - 0s 0s/step - loss: 0.2505 - accuracy: 0.7143

Epoch 629/1000

1/1 [=====] - 0s 0s/step - loss: 0.2505 - accuracy: 0.7143

Epoch 630/1000

1/1 [=====] - 0s 0s/step - loss: 0.2505 - accuracy: 0.7143

Epoch 631/1000

1/1 [=====] - 0s 0s/step - loss: 0.2504 - accuracy: 0.7143

Epoch 632/1000

1/1 [=====] - 0s 0s/step - loss: 0.2503 - accuracy: 0.7143

Epoch 633/1000

1/1 [=====] - 0s 0s/step - loss: 0.2503 - accuracy: 0.7143

Epoch 634/1000

1/1 [=====] - 0s 0s/step - loss: 0.2503 - accuracy: 0.7143

Epoch 635/1000

1/1 [=====] - 0s 0s/step - loss: 0.2502 - accuracy: 0.7143

Epoch 636/1000

1/1 [=====] - 0s 0s/step - loss: 0.2502 - accuracy: 0.7143

Epoch 637/1000

1/1 [=====] - 0s 0s/step - loss: 0.2501 - accuracy: 0.7143

Epoch 638/1000

1/1 [=====] - 0s 0s/step - loss: 0.2501 - accuracy: 0.7143

Epoch 639/1000

1/1 [=====] - 0s 958us/step - loss: 0.2500 - accuracy: 0.7143

Epoch 640/1000

1/1 [=====] - 0s 0s/step - loss: 0.2500 - accuracy: 0.7143

Epoch 641/1000

1/1 [=====] - 0s 0s/step - loss: 0.2500 - accuracy: 0.7143

Epoch 642/1000

1/1 [=====] - 0s 0s/step - loss: 0.2499 - accuracy: 0.7143

Epoch 643/1000

1/1 [=====] - 0s 0s/step - loss: 0.2499 - accuracy: 0.7143

Epoch 644/1000

1/1 [=====] - 0s 0s/step - loss: 0.2499 - accuracy: 0.7143

Epoch 645/1000

1/1 [=====] - 0s 0s/step - loss: 0.2498 - accuracy: 0.7143

Epoch 646/1000

1/1 [=====] - 0s 0s/step - loss: 0.2498 - accuracy: 0.7143

Epoch 647/1000

1/1 [=====] - 0s 0s/step - loss: 0.2497 - accuracy: 0.7143

Epoch 648/1000

1/1 [=====] - 0s 0s/step - loss: 0.2497 - accuracy: 0.7143

Epoch 649/1000

1/1 [=====] - 0s 0s/step - loss: 0.2497 - accuracy: 0.7143

Epoch 650/1000

1/1 [=====] - 0s 995us/step - loss: 0.2496 - accuracy: 0.7143

Epoch 651/1000

1/1 [=====] - 0s 0s/step - loss: 0.2496 - accuracy: 0.7143

Epoch 652/1000

1/1 [=====] - 0s 0s/step - loss: 0.2495 - accuracy: 0.7143

Epoch 653/1000

1/1 [=====] - 0s 958us/step - loss: 0.2495 - accuracy: 0.7143

Epoch 654/1000

1/1 [=====] - 0s 0s/step - loss: 0.2494 - accuracy: 0.7143

Epoch 655/1000

1/1 [=====] - 0s 0s/step - loss: 0.2494 - accuracy: 0.7143

Epoch 656/1000

1/1 [=====] - 0s 0s/step - loss: 0.2494 - accuracy: 0.7143

Epoch 657/1000

1/1 [=====] - 0s 0s/step - loss: 0.2493 - accuracy: 0.7143

Epoch 658/1000

1/1 [=====] - 0s 0s/step - loss: 0.2493 - accuracy: 0.7143

Epoch 659/1000

1/1 [=====] - 0s 0s/step - loss: 0.2493 - accuracy: 0.7143

Epoch 660/1000

1/1 [=====] - 0s 0s/step - loss: 0.2493 - accuracy: 0.7143

Epoch 661/1000

1/1 [=====] - 0s 0s/step - loss: 0.2492 - accuracy: 0.7143

Epoch 662/1000

1/1 [=====] - 0s 959us/step - loss: 0.2491 - accuracy: 0.7143

Epoch 663/1000

1/1 [=====] - 0s 0s/step - loss: 0.2491 - accuracy: 0.7143

Epoch 664/1000

1/1 [=====] - 0s 957us/step - loss: 0.2491 - accuracy: 0.7143

Epoch 665/1000

1/1 [=====] - 0s 0s/step - loss: 0.2490 - accuracy: 0.7143

Epoch 666/1000

1/1 [=====] - 0s 0s/step - loss: 0.2490 - accuracy: 0.7143

Epoch 667/1000

1/1 [=====] - 0s 0s/step - loss: 0.2490 - accuracy: 0.7143

Epoch 668/1000

1/1 [=====] - 0s 0s/step - loss: 0.2489 - accuracy: 0.7143

Epoch 669/1000

1/1 [=====] - 0s 0s/step - loss: 0.2489 - accuracy: 0.7143

Epoch 670/1000

1/1 [=====] - 0s 958us/step - loss: 0.2489 - accuracy: 0.7143

Epoch 671/1000

1/1 [=====] - 0s 0s/step - loss: 0.2488 - accuracy: 0.7143

Epoch 672/1000

1/1 [=====] - 0s 0s/step - loss: 0.2488 - accuracy: 0.7143

Epoch 673/1000

1/1 [=====] - 0s 0s/step - loss: 0.2488 - accuracy: 0.7143

Epoch 674/1000

1/1 [=====] - 0s 0s/step - loss: 0.2487 - accuracy: 0.7143

Epoch 675/1000

1/1 [=====] - 0s 0s/step - loss: 0.2487 - accuracy: 0.7143

Epoch 676/1000

1/1 [=====] - 0s 0s/step - loss: 0.2487 - accuracy: 0.7143

Epoch 677/1000

1/1 [=====] - 0s 0s/step - loss: 0.2486 - accuracy: 0.7143

Epoch 678/1000

1/1 [=====] - 0s 0s/step - loss: 0.2486 - accuracy: 0.7143

Epoch 679/1000

1/1 [=====] - 0s 0s/step - loss: 0.2486 - accuracy: 0.7143

Epoch 680/1000

1/1 [=====] - 0s 0s/step - loss: 0.2485 - accuracy: 0.7143

Epoch 681/1000

1/1 [=====] - 0s 0s/step - loss: 0.2485 - accuracy: 0.7143

Epoch 682/1000

1/1 [=====] - 0s 0s/step - loss: 0.2485 - accuracy: 0.7143

Epoch 683/1000

1/1 [=====] - 0s 0s/step - loss: 0.2484 - accuracy: 0.7143

Epoch 684/1000

1/1 [=====] - 0s 0s/step - loss: 0.2484 - accuracy: 0.7143

Epoch 685/1000

1/1 [=====] - 0s 0s/step - loss: 0.2484 - accuracy: 0.7143

Epoch 686/1000

1/1 [=====] - 0s 0s/step - loss: 0.2483 - accuracy: 0.7143

Epoch 687/1000

1/1 [=====] - 0s 0s/step - loss: 0.2483 - accuracy: 0.7143

Epoch 688/1000

1/1 [=====] - 0s 0s/step - loss: 0.2482 - accuracy: 0.7143

Epoch 689/1000

1/1 [=====] - 0s 0s/step - loss: 0.2482 - accuracy: 0.7143

Epoch 690/1000

1/1 [=====] - 0s 0s/step - loss: 0.2482 - accuracy: 0.7143

Epoch 691/1000

1/1 [=====] - 0s 998us/step - loss: 0.2482 - accuracy: 0.7143

Epoch 692/1000

1/1 [=====] - 0s 0s/step - loss: 0.2481 - accuracy: 0.7143

Epoch 693/1000

1/1 [=====] - 0s 0s/step - loss: 0.2481 - accuracy: 0.7143

Epoch 694/1000

1/1 [=====] - 0s 958us/step - loss: 0.2481 - accuracy: 0.7143

Epoch 695/1000

1/1 [=====] - 0s 0s/step - loss: 0.2480 - accuracy: 0.7143

Epoch 696/1000

1/1 [=====] - 0s 0s/step - loss: 0.2480 - accuracy: 0.7143

Epoch 697/1000

1/1 [=====] - 0s 0s/step - loss: 0.2480 - accuracy: 0.7143

Epoch 698/1000

1/1 [=====] - 0s 998us/step - loss: 0.2479 - accuracy: 0.7143

Epoch 699/1000

1/1 [=====] - 0s 0s/step - loss: 0.2479 - accuracy: 0.7143

Epoch 700/1000

1/1 [=====] - 0s 0s/step - loss: 0.2479 - accuracy: 0.7143

Epoch 701/1000

1/1 [=====] - 0s 1ms/step - loss: 0.2479 - accuracy: 0.7143

Epoch 702/1000

1/1 [=====] - 0s 0s/step - loss: 0.2478 - accuracy: 0.7143

Epoch 703/1000

1/1 [=====] - 0s 997us/step - loss: 0.2478 - accuracy: 0.7143

Epoch 704/1000

1/1 [=====] - 0s 0s/step - loss: 0.2478 - accuracy: 0.7143

Epoch 705/1000

1/1 [=====] - 0s 957us/step - loss: 0.2477 - accuracy: 0.7143

Epoch 706/1000

1/1 [=====] - 0s 0s/step - loss: 0.2477 - accuracy: 0.7143

Epoch 707/1000

1/1 [=====] - 0s 999us/step - loss: 0.2477 - accuracy: 0.7143

Epoch 708/1000

1/1 [=====] - 0s 0s/step - loss: 0.2476 - accuracy: 0.7143

Epoch 709/1000

1/1 [=====] - 0s 0s/step - loss: 0.2476 - accuracy: 0.7143

Epoch 710/1000

1/1 [=====] - 0s 0s/step - loss: 0.2476 - accuracy: 0.7143

Epoch 711/1000

1/1 [=====] - 0s 0s/step - loss: 0.2476 - accuracy: 0.7143

Epoch 712/1000

1/1 [=====] - 0s 0s/step - loss: 0.2475 - accuracy: 0.7143

Epoch 713/1000

1/1 [=====] - 0s 0s/step - loss: 0.2475 - accuracy: 0.7143

Epoch 714/1000

1/1 [=====] - 0s 0s/step - loss: 0.2475 - accuracy: 0.7143

Epoch 715/1000

1/1 [=====] - 0s 960us/step - loss: 0.2475 - accuracy: 0.7143

Epoch 716/1000

1/1 [=====] - 0s 0s/step - loss: 0.2474 - accuracy: 0.7143

Epoch 717/1000

1/1 [=====] - 0s 0s/step - loss: 0.2474 - accuracy: 0.7143

Epoch 718/1000

1/1 [=====] - 0s 0s/step - loss: 0.2474 - accuracy: 0.7143

Epoch 719/1000

1/1 [=====] - 0s 0s/step - loss: 0.2473 - accuracy: 0.7143

Epoch 720/1000

1/1 [=====] - 0s 0s/step - loss: 0.2473 - accuracy: 0.7143

Epoch 721/1000

1/1 [=====] - 0s 0s/step - loss: 0.2473 - accuracy: 0.7143

Epoch 722/1000

1/1 [=====] - 0s 0s/step - loss: 0.2473 - accuracy: 0.7143

Epoch 723/1000

1/1 [=====] - 0s 0s/step - loss: 0.2472 - accuracy: 0.7143

Epoch 724/1000

1/1 [=====] - 0s 0s/step - loss: 0.2472 - accuracy: 0.7143

Epoch 725/1000

1/1 [=====] - 0s 0s/step - loss: 0.2472 - accuracy: 0.7143

Epoch 726/1000

1/1 [=====] - 0s 0s/step - loss: 0.2471 - accuracy: 0.7143

Epoch 727/1000

1/1 [=====] - 0s 0s/step - loss: 0.2471 - accuracy: 0.7143

Epoch 728/1000

1/1 [=====] - 0s 0s/step - loss: 0.2471 - accuracy: 0.7143

Epoch 729/1000

1/1 [=====] - 0s 0s/step - loss: 0.2471 - accuracy: 0.7143

Epoch 730/1000

1/1 [=====] - 0s 0s/step - loss: 0.2471 - accuracy: 0.7143

Epoch 731/1000

1/1 [=====] - 0s 0s/step - loss: 0.2470 - accuracy: 0.7143

Epoch 732/1000

1/1 [=====] - 0s 0s/step - loss: 0.2470 - accuracy: 0.7143

Epoch 733/1000

1/1 [=====] - 0s 0s/step - loss: 0.2470 - accuracy: 0.7143

Epoch 734/1000

1/1 [=====] - 0s 0s/step - loss: 0.2469 - accuracy: 0.7143

Epoch 735/1000

1/1 [=====] - 0s 0s/step - loss: 0.2469 - accuracy: 0.7143

Epoch 736/1000

1/1 [=====] - 0s 954us/step - loss: 0.2469 - accuracy: 0.7143

Epoch 737/1000

1/1 [=====] - 0s 0s/step - loss: 0.2469 - accuracy: 0.7143

Epoch 738/1000

1/1 [=====] - 0s 0s/step - loss: 0.2468 - accuracy: 0.7143

Epoch 739/1000

1/1 [=====] - 0s 0s/step - loss: 0.2468 - accuracy: 0.7143

Epoch 740/1000

1/1 [=====] - 0s 0s/step - loss: 0.2468 - accuracy: 0.7143

Epoch 741/1000

1/1 [=====] - 0s 0s/step - loss: 0.2468 - accuracy: 0.7143

Epoch 742/1000

1/1 [=====] - 0s 0s/step - loss: 0.2468 - accuracy: 0.7143

Epoch 743/1000

1/1 [=====] - 0s 0s/step - loss: 0.2467 - accuracy: 0.7143

Epoch 744/1000

1/1 [=====] - 0s 958us/step - loss: 0.2467 - accuracy: 0.7143

Epoch 745/1000

1/1 [=====] - 0s 0s/step - loss: 0.2467 - accuracy: 0.7143

Epoch 746/1000

1/1 [=====] - 0s 0s/step - loss: 0.2466 - accuracy: 0.7143

Epoch 747/1000

1/1 [=====] - 0s 0s/step - loss: 0.2466 - accuracy: 0.7143

Epoch 748/1000

1/1 [=====] - 0s 0s/step - loss: 0.2466 - accuracy: 0.7143

Epoch 749/1000

1/1 [=====] - 0s 0s/step - loss: 0.2466 - accuracy: 0.7143

Epoch 750/1000

1/1 [=====] - 0s 0s/step - loss: 0.2465 - accuracy: 0.7143

Epoch 751/1000

1/1 [=====] - 0s 0s/step - loss: 0.2465 - accuracy: 0.7143

Epoch 752/1000

1/1 [=====] - 0s 0s/step - loss: 0.2465 - accuracy: 0.7143

Epoch 753/1000

1/1 [=====] - 0s 0s/step - loss: 0.2465 - accuracy: 0.7143

Epoch 754/1000

1/1 [=====] - 0s 0s/step - loss: 0.2465 - accuracy: 0.7143

Epoch 755/1000

1/1 [=====] - 0s 997us/step - loss: 0.2465 - accuracy: 0.7143

Epoch 756/1000

1/1 [=====] - 0s 0s/step - loss: 0.2464 - accuracy: 0.7143

Epoch 757/1000

1/1 [=====] - 0s 0s/step - loss: 0.2464 - accuracy: 0.7143

Epoch 758/1000

1/1 [=====] - 0s 0s/step - loss: 0.2464 - accuracy: 0.7143

Epoch 759/1000

1/1 [=====] - 0s 0s/step - loss: 0.2464 - accuracy: 0.7143

Epoch 760/1000

1/1 [=====] - 0s 0s/step - loss: 0.2463 - accuracy: 0.7143

Epoch 761/1000

1/1 [=====] - 0s 0s/step - loss: 0.2463 - accuracy: 0.7143

Epoch 762/1000

1/1 [=====] - 0s 0s/step - loss: 0.2463 - accuracy: 0.7143

Epoch 763/1000

1/1 [=====] - 0s 0s/step - loss: 0.2463 - accuracy: 0.7143

Epoch 764/1000

1/1 [=====] - 0s 958us/step - loss: 0.2462 - accuracy: 0.7143

Epoch 765/1000

1/1 [=====] - 0s 0s/step - loss: 0.2462 - accuracy: 0.7143

Epoch 766/1000

1/1 [=====] - 0s 957us/step - loss: 0.2462 - accuracy: 0.7143

Epoch 767/1000

1/1 [=====] - 0s 0s/step - loss: 0.2462 - accuracy: 0.7143

Epoch 768/1000

1/1 [=====] - 0s 0s/step - loss: 0.2461 - accuracy: 0.7143

Epoch 769/1000

1/1 [=====] - 0s 0s/step - loss: 0.2461 - accuracy: 0.7143

Epoch 770/1000

1/1 [=====] - 0s 0s/step - loss: 0.2461 - accuracy: 0.7143

Epoch 771/1000

1/1 [=====] - 0s 0s/step - loss: 0.2461 - accuracy: 0.7143

Epoch 772/1000

1/1 [=====] - 0s 0s/step - loss: 0.2461 - accuracy: 0.7143

Epoch 773/1000

1/1 [=====] - 0s 0s/step - loss: 0.2461 - accuracy: 0.7143

Epoch 774/1000

1/1 [=====] - 0s 0s/step - loss: 0.2460 - accuracy: 0.7143

Epoch 775/1000

1/1 [=====] - 0s 0s/step - loss: 0.2460 - accuracy: 0.7143

Epoch 776/1000

1/1 [=====] - 0s 0s/step - loss: 0.2460 - accuracy: 0.7143

Epoch 777/1000

1/1 [=====] - 0s 0s/step - loss: 0.2460 - accuracy: 0.7143

Epoch 778/1000

1/1 [=====] - 0s 0s/step - loss: 0.2460 - accuracy: 0.7143

Epoch 779/1000

1/1 [=====] - 0s 0s/step - loss: 0.2459 - accuracy: 0.7143

Epoch 780/1000

1/1 [=====] - 0s 0s/step - loss: 0.2459 - accuracy: 0.7143

Epoch 781/1000

1/1 [=====] - 0s 0s/step - loss: 0.2459 - accuracy: 0.7143

Epoch 782/1000

1/1 [=====] - 0s 0s/step - loss: 0.2459 - accuracy: 0.7143

Epoch 783/1000

1/1 [=====] - 0s 0s/step - loss: 0.2459 - accuracy: 0.7143

Epoch 784/1000

1/1 [=====] - 0s 0s/step - loss: 0.2459 - accuracy: 0.7143

Epoch 785/1000

1/1 [=====] - 0s 0s/step - loss: 0.2458 - accuracy: 0.7143

Epoch 786/1000

1/1 [=====] - 0s 0s/step - loss: 0.2458 - accuracy: 0.7143

Epoch 787/1000

1/1 [=====] - 0s 999us/step - loss: 0.2458 - accuracy: 0.7143

Epoch 788/1000

1/1 [=====] - 0s 0s/step - loss: 0.2457 - accuracy: 0.7143

Epoch 789/1000

1/1 [=====] - 0s 0s/step - loss: 0.2457 - accuracy: 0.7143

Epoch 790/1000

1/1 [=====] - 0s 0s/step - loss: 0.2457 - accuracy: 0.7143

Epoch 791/1000

1/1 [=====] - 0s 0s/step - loss: 0.2457 - accuracy: 0.7143

Epoch 792/1000

1/1 [=====] - 0s 0s/step - loss: 0.2457 - accuracy: 0.7143

Epoch 793/1000

1/1 [=====] - 0s 0s/step - loss: 0.2456 - accuracy: 0.7143

Epoch 794/1000

1/1 [=====] - 0s 0s/step - loss: 0.2456 - accuracy: 0.7143

Epoch 795/1000

1/1 [=====] - 0s 0s/step - loss: 0.2456 - accuracy: 0.7143

Epoch 796/1000

1/1 [=====] - 0s 0s/step - loss: 0.2456 - accuracy: 0.7143

Epoch 797/1000

1/1 [=====] - 0s 0s/step - loss: 0.2456 - accuracy: 0.7143

Epoch 798/1000

1/1 [=====] - 0s 0s/step - loss: 0.2456 - accuracy: 0.7143

Epoch 799/1000

1/1 [=====] - 0s 0s/step - loss: 0.2455 - accuracy: 0.7143

Epoch 800/1000

1/1 [=====] - 0s 0s/step - loss: 0.2455 - accuracy: 0.7143

Epoch 801/1000

1/1 [=====] - 0s 958us/step - loss: 0.2455 - accuracy: 0.7143

Epoch 802/1000

1/1 [=====] - 0s 0s/step - loss: 0.2455 - accuracy: 0.7143

Epoch 803/1000

1/1 [=====] - 0s 0s/step - loss: 0.2455 - accuracy: 0.7143

Epoch 804/1000

1/1 [=====] - 0s 0s/step - loss: 0.2454 - accuracy: 0.7143

Epoch 805/1000

1/1 [=====] - 0s 0s/step - loss: 0.2454 - accuracy: 0.7143

Epoch 806/1000

1/1 [=====] - 0s 0s/step - loss: 0.2454 - accuracy: 0.7143

Epoch 807/1000

1/1 [=====] - 0s 954us/step - loss: 0.2454 - accuracy: 0.7143

Epoch 808/1000

1/1 [=====] - 0s 0s/step - loss: 0.2454 - accuracy: 0.7143

Epoch 809/1000

1/1 [=====] - 0s 0s/step - loss: 0.2454 - accuracy: 0.7143

Epoch 810/1000

1/1 [=====] - 0s 0s/step - loss: 0.2454 - accuracy: 0.7143

Epoch 811/1000

1/1 [=====] - 0s 0s/step - loss: 0.2453 - accuracy: 0.7143

Epoch 812/1000

1/1 [=====] - 0s 0s/step - loss: 0.2453 - accuracy: 0.7143

Epoch 813/1000

1/1 [=====] - 0s 0s/step - loss: 0.2453 - accuracy: 0.7143

Epoch 814/1000

1/1 [=====] - 0s 0s/step - loss: 0.2453 - accuracy: 0.7143

Epoch 815/1000

1/1 [=====] - 0s 0s/step - loss: 0.2453 - accuracy: 0.7143

Epoch 816/1000

1/1 [=====] - 0s 0s/step - loss: 0.2452 - accuracy: 0.7143

Epoch 817/1000

1/1 [=====] - 0s 0s/step - loss: 0.2452 - accuracy: 0.7143

Epoch 818/1000

1/1 [=====] - 0s 0s/step - loss: 0.2452 - accuracy: 0.7143

Epoch 819/1000

1/1 [=====] - 0s 0s/step - loss: 0.2452 - accuracy: 0.7143

Epoch 820/1000

1/1 [=====] - 0s 0s/step - loss: 0.2452 - accuracy: 0.7143

Epoch 821/1000

1/1 [=====] - 0s 997us/step - loss: 0.2452 - accuracy: 0.7143

Epoch 822/1000

1/1 [=====] - 0s 0s/step - loss: 0.2452 - accuracy: 0.7143

Epoch 823/1000

1/1 [=====] - 0s 0s/step - loss: 0.2451 - accuracy: 0.7143

Epoch 824/1000

1/1 [=====] - 0s 0s/step - loss: 0.2451 - accuracy: 0.7143

Epoch 825/1000

1/1 [=====] - 0s 0s/step - loss: 0.2451 - accuracy: 0.7143

Epoch 826/1000

1/1 [=====] - 0s 0s/step - loss: 0.2451 - accuracy: 0.7143

Epoch 827/1000

1/1 [=====] - 0s 0s/step - loss: 0.2451 - accuracy: 0.7143

Epoch 828/1000

1/1 [=====] - 0s 0s/step - loss: 0.2450 - accuracy: 0.7143

Epoch 829/1000

1/1 [=====] - 0s 0s/step - loss: 0.2450 - accuracy: 0.7143

Epoch 830/1000

1/1 [=====] - 0s 0s/step - loss: 0.2450 - accuracy: 0.7143

Epoch 831/1000

1/1 [=====] - 0s 0s/step - loss: 0.2450 - accuracy: 0.7143

Epoch 832/1000

1/1 [=====] - 0s 0s/step - loss: 0.2450 - accuracy: 0.7143

Epoch 833/1000

1/1 [=====] - 0s 997us/step - loss: 0.2450 - accuracy: 0.7143

Epoch 834/1000

1/1 [=====] - 0s 0s/step - loss: 0.2449 - accuracy: 0.7143

Epoch 835/1000

1/1 [=====] - 0s 0s/step - loss: 0.2449 - accuracy: 0.7143

Epoch 836/1000

1/1 [=====] - 0s 0s/step - loss: 0.2449 - accuracy: 0.7143

Epoch 837/1000

1/1 [=====] - 0s 0s/step - loss: 0.2449 - accuracy: 0.7143

Epoch 838/1000

1/1 [=====] - 0s 0s/step - loss: 0.2449 - accuracy: 0.7143

Epoch 839/1000

1/1 [=====] - 0s 0s/step - loss: 0.2449 - accuracy: 0.7143

Epoch 840/1000

1/1 [=====] - 0s 1ms/step - loss: 0.2449 - accuracy: 0.7143

Epoch 841/1000

1/1 [=====] - 0s 0s/step - loss: 0.2449 - accuracy: 0.7143

Epoch 842/1000

1/1 [=====] - 0s 0s/step - loss: 0.2449 - accuracy: 0.7143

Epoch 843/1000

1/1 [=====] - 0s 0s/step - loss: 0.2448 - accuracy: 0.7143

Epoch 844/1000

1/1 [=====] - 0s 0s/step - loss: 0.2448 - accuracy: 0.7143

Epoch 845/1000

1/1 [=====] - 0s 0s/step - loss: 0.2448 - accuracy: 0.7143

Epoch 846/1000

1/1 [=====] - 0s 0s/step - loss: 0.2448 - accuracy: 0.7143

Epoch 847/1000

1/1 [=====] - 0s 996us/step - loss: 0.2448 - accuracy: 0.7143

Epoch 848/1000

1/1 [=====] - 0s 0s/step - loss: 0.2447 - accuracy: 0.7143

Epoch 849/1000

1/1 [=====] - 0s 0s/step - loss: 0.2447 - accuracy: 0.7143

Epoch 850/1000

1/1 [=====] - 0s 957us/step - loss: 0.2447 - accuracy: 0.7143

Epoch 851/1000

1/1 [=====] - 0s 0s/step - loss: 0.2447 - accuracy: 0.7143

Epoch 852/1000

1/1 [=====] - 0s 0s/step - loss: 0.2447 - accuracy: 0.7143

Epoch 853/1000

1/1 [=====] - 0s 0s/step - loss: 0.2447 - accuracy: 0.7143

Epoch 854/1000

1/1 [=====] - 0s 0s/step - loss: 0.2447 - accuracy: 0.7143

Epoch 855/1000

1/1 [=====] - 0s 0s/step - loss: 0.2447 - accuracy: 0.7143

Epoch 856/1000

1/1 [=====] - 0s 0s/step - loss: 0.2446 - accuracy: 0.7143

Epoch 857/1000

1/1 [=====] - 0s 0s/step - loss: 0.2446 - accuracy: 0.7143

Epoch 858/1000

1/1 [=====] - 0s 995us/step - loss: 0.2446 - accuracy: 0.7143

Epoch 859/1000

1/1 [=====] - 0s 0s/step - loss: 0.2446 - accuracy: 0.7143

Epoch 860/1000

1/1 [=====] - 0s 0s/step - loss: 0.2446 - accuracy: 0.7143

Epoch 861/1000

1/1 [=====] - 0s 0s/step - loss: 0.2446 - accuracy: 0.7143

Epoch 862/1000

1/1 [=====] - 0s 0s/step - loss: 0.2446 - accuracy: 0.7143

Epoch 863/1000

1/1 [=====] - 0s 0s/step - loss: 0.2445 - accuracy: 0.7143

Epoch 864/1000

1/1 [=====] - 0s 0s/step - loss: 0.2445 - accuracy: 0.7143

Epoch 865/1000

1/1 [=====] - 0s 0s/step - loss: 0.2445 - accuracy: 0.7143

Epoch 866/1000

1/1 [=====] - 0s 0s/step - loss: 0.2445 - accuracy: 0.7143

Epoch 867/1000

1/1 [=====] - 0s 0s/step - loss: 0.2445 - accuracy: 0.7143

Epoch 868/1000

1/1 [=====] - 0s 0s/step - loss: 0.2445 - accuracy: 0.7143

Epoch 869/1000

1/1 [=====] - 0s 0s/step - loss: 0.2445 - accuracy: 0.7143

Epoch 870/1000

1/1 [=====] - 0s 0s/step - loss: 0.2444 - accuracy: 0.7143

Epoch 871/1000

1/1 [=====] - 0s 0s/step - loss: 0.2444 - accuracy: 0.7143

Epoch 872/1000

1/1 [=====] - 0s 0s/step - loss: 0.2444 - accuracy: 0.7143

Epoch 873/1000

1/1 [=====] - 0s 0s/step - loss: 0.2444 - accuracy: 0.7143

Epoch 874/1000

1/1 [=====] - 0s 0s/step - loss: 0.2444 - accuracy: 0.7143

Epoch 875/1000

1/1 [=====] - 0s 0s/step - loss: 0.2444 - accuracy: 0.7143

Epoch 876/1000

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Epoch 877/1000

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Epoch 878/1000

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Epoch 879/1000

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Epoch 880/1000

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Epoch 881/1000

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Epoch 882/1000

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Epoch 883/1000

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Epoch 884/1000

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Epoch 885/1000

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Epoch 886/1000

1/1 [=====] - 0s 0s/step - loss: 0.2442 - accuracy: 0.7143

Epoch 887/1000

1/1 [=====] - 0s 0s/step - loss: 0.2442 - accuracy: 0.7143

Epoch 888/1000

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Epoch 889/1000

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Epoch 890/1000

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Epoch 891/1000

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Epoch 892/1000

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Epoch 893/1000

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Epoch 894/1000

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Epoch 895/1000

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Epoch 896/1000

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Epoch 897/1000

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Epoch 898/1000

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Epoch 899/1000

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Epoch 900/1000

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Epoch 901/1000

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Epoch 902/1000

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Epoch 903/1000

1/1 [=====] - 0s 0s/step - loss: 0.2440 - accuracy: 0.7143

Epoch 904/1000

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Epoch 905/1000

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Epoch 906/1000

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Epoch 907/1000

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Epoch 908/1000

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Epoch 909/1000

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Epoch 910/1000

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Epoch 911/1000

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Epoch 912/1000

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Epoch 913/1000

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Epoch 914/1000

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Epoch 915/1000

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Epoch 916/1000

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Epoch 917/1000

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Epoch 918/1000

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Epoch 919/1000

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Epoch 920/1000

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Epoch 921/1000

1/1 [=====] - 0s 959us/step - loss: 0.2438 - accuracy: 0.7143

Epoch 922/1000

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Epoch 923/1000

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Epoch 924/1000

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Epoch 925/1000

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Epoch 926/1000

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Epoch 927/1000

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Epoch 928/1000

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Epoch 929/1000

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Epoch 930/1000

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Epoch 931/1000

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Epoch 932/1000

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Epoch 934/1000

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Epoch 935/1000

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Epoch 938/1000

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Epoch 939/1000

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Epoch 940/1000

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Epoch 941/1000

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Epoch 942/1000

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Epoch 950/1000

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Epoch 951/1000

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Epoch 952/1000

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Epoch 966/1000

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Epoch 982/1000

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Epoch 983/1000

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Epoch 984/1000

1/1 [=====] - 0s 955us/step - loss: 0.2433 - accuracy: 0.7143

Epoch 985/1000

1/1 [=====] - 0s 1ms/step - loss: 0.2433 - accuracy: 0.7143

Epoch 986/1000

1/1 [=====] - 0s 0s/step - loss: 0.2433 - accuracy: 0.7143

Epoch 987/1000

1/1 [=====] - 0s 959us/step - loss: 0.2433 - accuracy: 0.7143

Epoch 988/1000

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Epoch 989/1000

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Epoch 994/1000

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Epoch 995/1000

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Epoch 1000/1000

1/1 [=====] - 0s 0s/step - loss: 0.2432 - accuracy: 0.7143

dict_keys(['loss', 'accuracy'])



