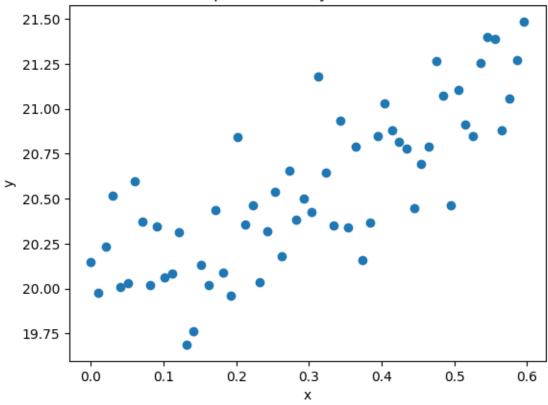
lab1

March 6, 2024

Scatter plot of x and y of the train data



```
[36]: def linear_regression(x, m, b):
    return m * x + b

def compute_gradients(x, y, m, b):
    y_pred = linear_regression(x, m, b)
    dm = (1/len(x)) * np.sum((y_pred - y) * x)
    db = (1/len(x)) * np.sum(y_pred - y)
    return dm, db

m = 0
b = 0
learning_rate = 0.01
iterations = 1000

for epoch in range(iterations):
    dm, db = compute_gradients(x_train, y_train, m, b)
    m = m - learning_rate * dm
    b = b - learning_rate * db
```

```
# b.
                   Mean Squared Error
 mse = mean_squared_error(linear_regression(x_train, m, b), y_train)
 print(f"Epoch {epoch + 1}/{epochs}, MSE: {mse}, Weights: {weights.
→flatten()}")
Epoch 1/1000, MSE: 413.3171551595871, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 2/1000, MSE: 404.3557535251843, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 3/1000, MSE: 395.5888804625635, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 4/1000, MSE: 387.01231315552474, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 5/1000, MSE: 378.6219204566065, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 6/1000, MSE: 370.4136608971431, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 7/1000, MSE: 362.3835807405215, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
```

```
Epoch 8/1000, MSE: 354.5278120776967, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 9/1000, MSE: 346.8425709640502, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 10/1000, MSE: 339.3241555966928, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 11/1000, MSE: 331.96894453133575, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 12/1000, MSE: 324.7733949378688, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 13/1000, MSE: 317.7340408938062, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 14/1000, MSE: 310.84749171477927, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 15/1000, MSE: 304.1104303212703, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
```

```
Epoch 16/1000, MSE: 297.5196116407998, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 17/1000, MSE: 291.07186104480223, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 18/1000, MSE: 284.76407281943085, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 19/1000, MSE: 278.5932086695599, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 20/1000, MSE: 272.55629625526115, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 21/1000, MSE: 266.6504277600515, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 22/1000, MSE: 260.87275849022006, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 23/1000, MSE: 255.22050550456126, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
```

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Epoch 24/1000, MSE: 249.69094627385357, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 25/1000, MSE: 244.28141736943888, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 26/1000, MSE: 238.98931318026914, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 27/1000, MSE: 233.81208465780412, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 28/1000, MSE: 228.74723808815423, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 29/1000, MSE: 223.79233389087847, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 30/1000, MSE: 218.94498544385675, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 31/1000, MSE: 214.20285793367347, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
```

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Epoch 32/1000, MSE: 209.56366723095533, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 33/1000, MSE: 205.0251787901244, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 34/1000, MSE: 200.58520657303475, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 35/1000, MSE: 196.2416119959751, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 36/1000, MSE: 191.99230289952916, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 37/1000, MSE: 187.83523254079947, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 38/1000, MSE: 183.76839860750673, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 39/1000, MSE: 179.78984225349177, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
```

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Epoch 40/1000, MSE: 175.89764715515454, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 41/1000, MSE: 172.08993858837596, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 42/1000, MSE: 168.36488252547812, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 43/1000, MSE: 164.72068475178693, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 44/1000, MSE: 161.15559000137358, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 45/1000, MSE: 157.66788111155583, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 46/1000, MSE: 154.2558781957549, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 47/1000, MSE: 150.91793783430637, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
```

```
Epoch 48/1000, MSE: 147.65245228283865, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 49/1000, MSE: 144.45784869783418, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 50/1000, MSE: 141.33258837900357, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 51/1000, MSE: 138.27516602810525, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 52/1000, MSE: 135.28410902385542, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 53/1000, MSE: 132.3579767125774, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 54/1000, MSE: 129.49535971425036, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 55/1000, MSE: 126.69487924362178, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
```

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Epoch 56/1000, MSE: 123.95518644605735, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 57/1000, MSE: 121.27496174780835, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 58/1000, MSE: 118.65291422038291, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 59/1000, MSE: 116.0877809587162, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 60/1000, MSE: 113.57832647283868, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 61/1000, MSE: 111.12334209275033, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 62/1000, MSE: 108.72164538621365, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 63/1000, MSE: 106.37207958918535, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
```

```
Epoch 64/1000, MSE: 104.07351304861203, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 65/1000, MSE: 101.82483867732181, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 66/1000, MSE: 99.62497342074903, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 67/1000, MSE: 97.47285773523546, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 68/1000, MSE: 95.36745507765606, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 69/1000, MSE: 93.30775140612454, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 70/1000, MSE: 91.29275469153728, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 71/1000, MSE: 89.32149443972045, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
```

```
Epoch 72/1000, MSE: 87.3930212239507, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 73/1000, MSE: 85.50640622762373, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 74/1000, MSE: 83.66074079685043, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 75/1000, MSE: 81.85513600276558, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 76/1000, MSE: 80.08872221333766, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 77/1000, MSE: 78.36064867447391, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 78/1000, MSE: 76.67008310021866, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 79/1000, MSE: 75.01621127184782, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
```

```
Epoch 80/1000, MSE: 73.39823664566593, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 81/1000, MSE: 71.81537996931742, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 82/1000, MSE: 70.2668789064267, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 83/1000, MSE: 68.75198766938686, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 84/1000, MSE: 67.26997666011948, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 85/1000, MSE: 65.82013211863297, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 86/1000, MSE: 64.40175577920994, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 87/1000, MSE: 63.014164534058025, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
```

```
Epoch 88/1000, MSE: 61.65669010426237, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 89/1000, MSE: 60.328678717880805, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 90/1000, MSE: 59.02949079502688, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 91/1000, MSE: 57.75850063978944, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 92/1000, MSE: 56.515096138839695, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 93/1000, MSE: 55.29867846658108, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 94/1000, MSE: 54.108661796699586, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 95/1000, MSE: 52.94447301997583, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \
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```
Epoch 96/1000, MSE: 51.80555146822284, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 97/1000, MSE: 50.69134864421662, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 98/1000, MSE: 49.601327957489254, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 99/1000, MSE: 48.53496446585753, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 100/1000, MSE: 47.49174462256237, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 101/1000, MSE: 46.471166028897464, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 102/1000, MSE: 45.47273719220762, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 103/1000, MSE: 44.49597728914068, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \
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Epoch 104/1000, MSE: 43.54041593403874, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 105/1000, MSE: 42.60559295235694, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 106/1000, MSE: 41.69105815900105, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 107/1000, MSE: 40.7963711414769, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 108/1000, MSE: 39.92110104774703, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 109/1000, MSE: 39.06482637869278, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 110/1000, MSE: 38.22713478508129, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 111/1000, MSE: 37.40762286894028, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
```

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Epoch 112/1000, MSE: 36.605895989244374, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 113/1000, MSE: 35.82156807181956, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 114/1000, MSE: 35.05426142337433, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 115/1000, MSE: 34.303606549567775, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 116/1000, MSE: 33.569241977027126, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 117/1000, MSE: 32.85081407922882, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 118/1000, MSE: 32.14797690615936, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 119/1000, MSE: 31.460392017673957, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
```

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Epoch 120/1000, MSE: 30.787728320472617, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 121/1000, MSE: 30.129661908614985, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 122/1000, MSE: 29.485875907497533, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 123/1000, MSE: 28.856060321217488, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 124/1000, MSE: 28.23991188325021, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 125/1000, MSE: 27.63713391036821, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 126/1000, MSE: 27.047436159731117, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 127/1000, MSE: 26.470534689077954, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
```

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Epoch 128/1000, MSE: 25.906151719954455, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 129/1000, MSE: 25.35401550390936, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 130/1000, MSE: 24.813860191595282, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 131/1000, MSE: 24.285425704711244, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 132/1000, MSE: 23.768457610724987, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 133/1000, MSE: 23.262707000314812, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 134/1000, MSE: 22.76793036747197, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 135/1000, MSE: 22.283889492205688, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
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Epoch 136/1000, MSE: 21.810351325794556, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 137/1000, MSE: 21.347087878528736, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 138/1000, MSE: 20.893876109889145, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 139/1000, MSE: 20.450497821110627, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 140/1000, MSE: 20.01673955007732, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 141/1000, MSE: 19.592392468499632, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 142/1000, MSE: 19.177252281323312, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 143/1000, MSE: 18.771119128322223, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
```

```
Epoch 144/1000, MSE: 18.373797487827105, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 145/1000, MSE: 17.98509608254448, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 146/1000, MSE: 17.604827787419865, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 147/1000, MSE: 17.232809539501037, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 148/1000, MSE: 16.86886224975817, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 149/1000, MSE: 16.51281071681804, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 150/1000, MSE: 16.16448354257091, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 151/1000, MSE: 15.823713049609427, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0
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```
Epoch 152/1000, MSE: 15.490335200459747, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 153/1000, MSE: 15.164189518565996, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 154/1000, MSE: 14.84511901099003, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 155/1000, MSE: 14.532970092789125, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 156/1000, MSE: 14.227592513035384, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 157/1000, MSE: 13.92883928244104, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 158/1000, MSE: 13.63656660255493, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 159/1000, MSE: 13.350633796495881, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
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Epoch 160/1000, MSE: 13.070903241189828, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 161/1000, MSE: 12.797240301077842, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 162/1000, MSE: 12.529513263263313, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 163/1000, MSE: 12.267593274066844, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 164/1000, MSE: 12.011354276958503, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 165/1000, MSE: 11.760672951837426, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 166/1000, MSE: 11.515428655629457, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 167/1000, MSE: 11.27550336417441, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
```

```
Epoch 168/1000, MSE: 11.04078161537476, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 169/1000, MSE: 10.81115045357845, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 170/1000, MSE: 10.586499375169115, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 171/1000, MSE: 10.366720275337341, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 172/1000, MSE: 10.151707396007504, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 173/1000, MSE: 9.941357274894886, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 174/1000, MSE: 9.735568695668805, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 175/1000, MSE: 9.534242639197489, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0
```

```
Epoch 176/1000, MSE: 9.337282235851342, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 177/1000, MSE: 9.14459271884169, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 178/1000, MSE: 8.95608137857232, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 179/1000, MSE: 8.77165751798209, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 180/1000, MSE: 8.591232408856852, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 181/1000, MSE: 8.414719249089783, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 182/1000, MSE: 8.242033120869554, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 183/1000, MSE: 8.073090949776086, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
```

```
Epoch 184/1000, MSE: 7.907811464764296, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 185/1000, MSE: 7.746115159016502, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 186/1000, MSE: 7.587924251644632, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 187/1000, MSE: 7.433162650223781, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 188/1000, MSE: 7.281755914139183, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 189/1000, MSE: 7.1336312187287, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 190/1000, MSE: 6.988717320203845, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 191/1000, MSE: 6.846944521332209, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
```

```
Epoch 192/1000, MSE: 6.7082446378648735, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 193/1000, MSE: 6.57255096569262, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 194/1000, MSE: 6.4397982487151255, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 195/1000, MSE: 6.309922647407645, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 196/1000, MSE: 6.182861708070019, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 197/1000, MSE: 6.058554332743252, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 198/1000, MSE: 5.936940749779156, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 199/1000, MSE: 5.817962485048821, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0
```

```
Epoch 200/1000, MSE: 5.701562333776099, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 201/1000, MSE: 5.587684332982574, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 202/1000, MSE: 5.4762737345306824, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 203/1000, MSE: 5.367276978751911, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 204/1000, MSE: 5.260641668647648, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 205/1000, MSE: 5.15631654464994, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 206/1000, MSE: 5.05425145993017, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 207/1000, MSE: 4.954397356243822, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
```

```
Epoch 208/1000, MSE: 4.856706240299464, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 209/1000, MSE: 4.761131160640833, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 210/1000, MSE: 4.667626185030688, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 211/1000, MSE: 4.576146378325673, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 212/1000, MSE: 4.4866477808314205, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 213/1000, MSE: 4.399087387127529, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 214/1000, MSE: 4.313423125352239, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 215/1000, MSE: 4.229613836936784, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
```

```
Epoch 216/1000, MSE: 4.147619256779623, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 217/1000, MSE: 4.0673999938511445, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 218/1000, MSE: 3.98891751221929, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 219/1000, MSE: 3.912134112487165, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 220/1000, MSE: 3.8370129136335427, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 221/1000, MSE: 3.7635178352476037, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 222/1000, MSE: 3.691613580149328, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 223/1000, MSE: 3.62126561738714, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
```

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Epoch 224/1000, MSE: 3.5524401656046436, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 225/1000, MSE: 3.485104176768452, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 226/1000, MSE: 3.4192253202492133, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 227/1000, MSE: 3.354771967248268, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 228/1000, MSE: 3.2917131755623106, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 229/1000, MSE: 3.2300186746788095, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 230/1000, MSE: 3.1696588511949684, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 231/1000, MSE: 3.110604734553207, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
```

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Epoch 232/1000, MSE: 3.0528279830863165, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 233/1000, MSE: 2.996300870365522, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 234/1000, MSE: 2.9409962718449045, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 235/1000, MSE: 2.886887651795756, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 236/1000, MSE: 2.833949050524574, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 237/1000, MSE: 2.782155071868475, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 238/1000, MSE: 2.731480870962119, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 239/1000, MSE: 2.6819021422701637, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
```

```
Epoch 240/1000, MSE: 2.6333951078795037, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 241/1000, MSE: 2.5859365060456736, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 242/1000, MSE: 2.539503579987847, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 243/1000, MSE: 2.4940740669271606, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 244/1000, MSE: 2.4496261873628873, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 245/1000, MSE: 2.406138634581492, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 246/1000, MSE: 2.363590564393353, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 247/1000, MSE: 2.32196158509233, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
```

```
Epoch 248/1000, MSE: 2.281231747633263, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 249/1000, MSE: 2.2413815360227103, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 250/1000, MSE: 2.202391857918274, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 251/1000, MSE: 2.1642440354319983, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 252/1000, MSE: 2.1269197961334103, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 253/1000, MSE: 2.0904012642478706, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 254/1000, MSE: 2.0546709520459787, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 255/1000, MSE: 2.0197117514198886, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
```

```
Epoch 256/1000, MSE: 1.9855069256425202, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 257/1000, MSE: 1.9520401013056332, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 258/1000, MSE: 1.9192952604329092, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 259/1000, MSE: 1.8872567327642644, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 260/1000, MSE: 1.8559091882076084, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 261/1000, MSE: 1.8252376294545292, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 262/1000, MSE: 1.7952273847562135, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 263/1000, MSE: 1.7658641008562137, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
```

```
Epoch 264/1000, MSE: 1.7371337360766466, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 265/1000, MSE: 1.7090225535544243, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 266/1000, MSE: 1.6815171146243817, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 267/1000, MSE: 1.6546042723459822, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 268/1000, MSE: 1.6282711651705835, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 269/1000, MSE: 1.6025052107461653, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 270/1000, MSE: 1.577294099856523, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 271/1000, MSE: 1.5526257904920724, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
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Epoch 272/1000, MSE: 1.528488502049304, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 273/1000, MSE: 1.5048707096562224, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 274/1000, MSE: 1.4817611386209244, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 275/1000, MSE: 1.4591487590006862, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 276/1000, MSE: 1.4370227802889919, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 277/1000, MSE: 1.4153726462178209, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 278/1000, MSE: 1.3941880296728406, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 279/1000, MSE: 1.3734588277189277, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \
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Epoch 280/1000, MSE: 1.353175156733707, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 281/1000, MSE: 1.33332734764671, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 282/1000, MSE: 1.3139059412819007, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 283/1000, MSE: 1.2949016838012801, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 284/1000, MSE: 1.276305522247433, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 285/1000, MSE: 1.2581086001828128, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 286/1000, MSE: 1.2403022534236967, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 287/1000, MSE: 1.2228780058667417, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \
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Epoch 288/1000, MSE: 1.2058275654061619, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 289/1000, MSE: 1.18914281993949, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 290/1000, MSE: 1.1728158334600962, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 291/1000, MSE: 1.156838842234493, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 292/1000, MSE: 1.1412042510626472, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 293/1000, MSE: 1.1259046296194515, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 294/1000, MSE: 1.1109327088756393, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 295/1000, MSE: 1.0962813775963638, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \
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Epoch 296/1000, MSE: 1.0819436789158252, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 297/1000, MSE: 1.0679128069862143, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 298/1000, MSE: 1.0541821036994312, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 299/1000, MSE: 1.0407450554799507, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 300/1000, MSE: 1.0275952901473207, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 301/1000, MSE: 1.0147265738467717, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 302/1000, MSE: 1.0021328080464253, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 303/1000, MSE: 0.989808026599737, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
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Epoch 304/1000, MSE: 0.9777463928716643, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 305/1000, MSE: 0.9659421969272379, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 306/1000, MSE: 0.9543898527811687, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 307/1000, MSE: 0.943083895707152, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 308/1000, MSE: 0.9320189796055763, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 309/1000, MSE: 0.9211898744283816, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 310/1000, MSE: 0.9105914636598335, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 311/1000, MSE: 0.9002187418519412, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
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Epoch 312/1000, MSE: 0.8900668122134185, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 313/1000, MSE: 0.8801308842509801, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 314/1000, MSE: 0.8704062714618079, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 315/1000, MSE: 0.8608883890761353, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 316/1000, MSE: 0.851572751848847, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 317/1000, MSE: 0.842454971898979, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 318/1000, MSE: 0.8335307565961619, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 319/1000, MSE: 0.8247959064929111, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
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Epoch 320/1000, MSE: 0.8162463133018262, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 321/1000, MSE: 0.8078779579166866, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 322/1000, MSE: 0.7996869084765144, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 323/1000, MSE: 0.7916693184716486, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 324/1000, MSE: 0.7838214248909563, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 325/1000, MSE: 0.7761395464092457, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 326/1000, MSE: 0.7686200816140302, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 327/1000, MSE: 0.7612595072707814, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
```

```
Epoch 328/1000, MSE: 0.7540543766258584, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 329/1000, MSE: 0.7470013177462523, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 330/1000, MSE: 0.740097031895392, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 331/1000, MSE: 0.7333382919441934, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 332/1000, MSE: 0.7267219408166077, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 333/1000, MSE: 0.720244889968921, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 334/1000, MSE: 0.7139041179020491, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 335/1000, MSE: 0.7076966687061365, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
```

```
Epoch 336/1000, MSE: 0.7016196506367572, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 337/1000, MSE: 0.6956702347220011, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 338/1000, MSE: 0.6898456533998257, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 339/1000, MSE: 0.6841431991849638, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 340/1000, MSE: 0.6785602233647797, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 341/1000, MSE: 0.6730941347234404, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 342/1000, MSE: 0.6677423982937813, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 343/1000, MSE: 0.6625025341362526, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
```

```
Epoch 344/1000, MSE: 0.6573721161443888, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 345/1000, MSE: 0.6523487708762032, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 346/1000, MSE: 0.6474301764109474, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 347/1000, MSE: 0.6426140612306932, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 348/1000, MSE: 0.6378982031261858, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 349/1000, MSE: 0.6332804281264688, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 350/1000, MSE: 0.6287586094517085, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 351/1000, MSE: 0.6243306664887858, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
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```
Epoch 352/1000, MSE: 0.6199945637891066, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 353/1000, MSE: 0.6157483100881738, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 354/1000, MSE: 0.6115899573464372, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 355/1000, MSE: 0.6075175998109832, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 356/1000, MSE: 0.6035293730975584, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 357/1000, MSE: 0.5996234532925527, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 358/1000, MSE: 0.5957980560744669, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 359/1000, MSE: 0.59205143585444, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
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Epoch 360/1000, MSE: 0.5883818849354515, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 361/1000, MSE: 0.5847877326897682, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 362/1000, MSE: 0.5812673447542345, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 363/1000, MSE: 0.577819122243059, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 364/1000, MSE: 0.5744415009776602, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 365/1000, MSE: 0.5711329507332523, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 366/1000, MSE: 0.5678919745017798, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 367/1000, MSE: 0.5647171077708409, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
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Epoch 368/1000, MSE: 0.5616069178182834, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 369/1000, MSE: 0.5585600030221008, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 370/1000, MSE: 0.5555749921853098, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 371/1000, MSE: 0.5526505438754887, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 372/1000, MSE: 0.5497853457786505, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 373/1000, MSE: 0.5469781140671393, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 374/1000, MSE: 0.5442275927812513, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 375/1000, MSE: 0.5415325532242826, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
```

```
Epoch 376/1000, MSE: 0.5388917933706981, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 377/1000, MSE: 0.536304137287164, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 378/1000, MSE: 0.5337684345661352, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 379/1000, MSE: 0.5312835597717476, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 380/1000, MSE: 0.5288484118977232, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 381/1000, MSE: 0.5264619138370696, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 382/1000, MSE: 0.5241230118632659, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 383/1000, MSE: 0.521830675122723, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
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```
Epoch 384/1000, MSE: 0.5195838951382605, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 385/1000, MSE: 0.5173816853233613, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 386/1000, MSE: 0.5152230805069711, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 387/1000, MSE: 0.5131071364686107, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 388/1000, MSE: 0.5110329294835838, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 389/1000, MSE: 0.5089995558780572, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 390/1000, MSE: 0.5070061315937997, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 391/1000, MSE: 0.5050517917623594, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
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Epoch 392/1000, MSE: 0.5031356902885041, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 393/1000, MSE: 0.5012569994426871, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 394/1000, MSE: 0.4994149094623685, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 395/1000, MSE: 0.4976086281619892, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 396/1000, MSE: 0.4958373805514095, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 397/1000, MSE: 0.49410040846263575, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 398/1000, MSE: 0.49239697018464135, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 399/1000, MSE: 0.4907263401061252, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
```

```
Epoch 400/1000, MSE: 0.48908780836601556, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 401/1000, MSE: 0.48748068051156945, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 402/1000, MSE: 0.48590427716388784, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 403/1000, MSE: 0.484357933690698, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 404/1000, MSE: 0.4828409998862259, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 405/1000, MSE: 0.4813528396580344, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 406/1000, MSE: 0.47989283072065203, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 407/1000, MSE: 0.4784603642958501, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
```

```
Epoch 408/1000, MSE: 0.47705484481942995, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 409/1000, MSE: 0.4756756896543728, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 410/1000, MSE: 0.47432232881021996, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 411/1000, MSE: 0.47299420466853836, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 412/1000, MSE: 0.47169077171435486, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 413/1000, MSE: 0.47041149627341183, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 414/1000, MSE: 0.46915585625513423, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 415/1000, MSE: 0.4679233409011647, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
```

```
Epoch 416/1000, MSE: 0.46671345053937363, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 417/1000, MSE: 0.4655256963431954, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 418/1000, MSE: 0.46435960009619376, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 419/1000, MSE: 0.4632146939617425, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 420/1000, MSE: 0.4620905202576938, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 421/1000, MSE: 0.4609866312359564, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 422/1000, MSE: 0.45990258886683777, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 423/1000, MSE: 0.45883796462808546, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
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```
Epoch 424/1000, MSE: 0.4577923392984982, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 425/1000, MSE: 0.4567653027560186, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 426/1000, MSE: 0.4557564537802125, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 427/1000, MSE: 0.4547653998590301, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 428/1000, MSE: 0.4537917569997704, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 429/1000, MSE: 0.4528351495441403, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 430/1000, MSE: 0.45189520998733196, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 431/1000, MSE: 0.4509715788010313, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
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Epoch 432/1000, MSE: 0.45006390426026255, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 433/1000, MSE: 0.4491718422739943, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 434/1000, MSE: 0.44829505621942506, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 435/1000, MSE: 0.4474332167798616, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 436/1000, MSE: 0.4465860017861212, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 437/1000, MSE: 0.4457530960613693, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 438/1000, MSE: 0.4449341912693392, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 439/1000, MSE: 0.4441289857658319, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
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Epoch 440/1000, MSE: 0.44333718445344716, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 441/1000, MSE: 0.4425584986394645, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 442/1000, MSE: 0.44179264589681494, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 443/1000, MSE: 0.44103934992806365, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 444/1000, MSE: 0.4402983404323546, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 445/1000, MSE: 0.4395693529752304, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 446/1000, MSE: 0.43885212886128927, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 447/1000, MSE: 0.4381464150096028, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
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Epoch 448/1000, MSE: 0.43745196383183715, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 449/1000, MSE: 0.4367685331130209, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 450/1000, MSE: 0.43609588589490006, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 451/1000, MSE: 0.4354337903618291, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 452/1000, MSE: 0.43478201972913055, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 453/1000, MSE: 0.43414035213389074, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 454/1000, MSE: 0.43350857052811365, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 455/1000, MSE: 0.43288646257420155, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \
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```
Epoch 456/1000, MSE: 0.4322738205427021, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 457/1000, MSE: 0.43167044121227577, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 458/1000, MSE: 0.4310761257718358, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 459/1000, MSE: 0.43049067972480765, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 460/1000, MSE: 0.42991391279547625, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 461/1000, MSE: 0.42934563883735455, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 462/1000, MSE: 0.4287856757435517, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 463/1000, MSE: 0.4282338453590793, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
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Epoch 464/1000, MSE: 0.4276899733950657, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 465/1000, MSE: 0.4271538893448302, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 466/1000, MSE: 0.4266254264017819, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 467/1000, MSE: 0.4261044213790976, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 468/1000, MSE: 0.42559071463114484, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 469/1000, MSE: 0.42508414997661165, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 470/1000, MSE: 0.4245845746233004, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 471/1000, MSE: 0.42409183909456377, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
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Epoch 472/1000, MSE: 0.4236057971573265, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 473/1000, MSE: 0.4231263057516761, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 474/1000, MSE: 0.42265322492198215, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 475/1000, MSE: 0.4221864177495063, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 476/1000, MSE: 0.4217257502864829, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 477/1000, MSE: 0.4212710914916216, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 478/1000, MSE: 0.42082231316701585, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 479/1000, MSE: 0.42037928989642015, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
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```
Epoch 480/1000, MSE: 0.4199418989848659, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 481/1000, MSE: 0.4195100203995896, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 482/1000, MSE: 0.4190835367122398, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 483/1000, MSE: 0.41866233304234696, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 484/1000, MSE: 0.4182462970020074, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 485/1000, MSE: 0.4178353186417809, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 486/1000, MSE: 0.41742929039775667, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 487/1000, MSE: 0.4170281070397665, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
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```
Epoch 488/1000, MSE: 0.41663166562072623, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 489/1000, MSE: 0.4162398654270774, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 490/1000, MSE: 0.41585260793029805, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 491/1000, MSE: 0.4154697967394752, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 492/1000, MSE: 0.4150913375548997, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 493/1000, MSE: 0.4147171381226719, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 494/1000, MSE: 0.41434710819029247, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 495/1000, MSE: 0.41398115946321673, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
```

```
Epoch 496/1000, MSE: 0.41361920556235016, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 497/1000, MSE: 0.413261161982472, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 498/1000, MSE: 0.412906946051555, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 499/1000, MSE: 0.41255647689097275, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 500/1000, MSE: 0.4122096753765691, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 501/1000, MSE: 0.41186646410057276, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 502/1000, MSE: 0.4115267673343374, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 503/1000, MSE: 0.41119051099189524, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
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Epoch 504/1000, MSE: 0.41085762259429565, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 505/1000, MSE: 0.4105280312347213, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 506/1000, MSE: 0.4102016675443629, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 507/1000, MSE: 0.40987846365902925, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 508/1000, MSE: 0.40955835318648875, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 509/1000, MSE: 0.4092412711745175, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 510/1000, MSE: 0.4089271540796366, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 511/1000, MSE: 0.4086159397365358, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
```

```
Epoch 512/1000, MSE: 0.4083075673281541, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 513/1000, MSE: 0.40800197735641425, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 514/1000, MSE: 0.40769911161359096, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 515/1000, MSE: 0.40739891315429966, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 516/1000, MSE: 0.40710132626809614, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 517/1000, MSE: 0.406806296452666, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 518/1000, MSE: 0.40651377038760383, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 519/1000, MSE: 0.406223695908753, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
```

```
Epoch 520/1000, MSE: 0.4059360219831084, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 521/1000, MSE: 0.4056506986842618, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 522/1000, MSE: 0.40536767716838135, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 523/1000, MSE: 0.40508690965071, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 524/1000, MSE: 0.404808349382578, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 525/1000, MSE: 0.40453195062890934, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 526/1000, MSE: 0.4042576686462234, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 527/1000, MSE: 0.40398545966110605, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
```

```
Epoch 528/1000, MSE: 0.40371528084915453, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 529/1000, MSE: 0.40344709031437753, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 530/1000, MSE: 0.4031808470690389, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 531/1000, MSE: 0.40291651101394543, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 532/1000, MSE: 0.4026540429191575, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 533/1000, MSE: 0.40239340440511867, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 534/1000, MSE: 0.40213455792419944, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 535/1000, MSE: 0.40187746674263614, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \
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Epoch 536/1000, MSE: 0.40162209492286516, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 537/1000, MSE: 0.4013684073062392, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 538/1000, MSE: 0.40111636949611945, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 539/1000, MSE: 0.40086594784133517, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 540/1000, MSE: 0.4006171094200013, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 541/1000, MSE: 0.4003698220236871, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 542/1000, MSE: 0.40012405414193086, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 543/1000, MSE: 0.39987977494708843, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
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Epoch 544/1000, MSE: 0.39963695427950907, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 545/1000, MSE: 0.3993955626330402, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 546/1000, MSE: 0.39915557114083716, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 547/1000, MSE: 0.3989169515614875, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 548/1000, MSE: 0.3986796762654373, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 549/1000, MSE: 0.3984437182217052, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 550/1000, MSE: 0.39820905098489207, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 551/1000, MSE: 0.3979756486824702, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
```

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Epoch 552/1000, MSE: 0.39774348600234605, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 553/1000, MSE: 0.3975125381806966, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 554/1000, MSE: 0.3972827809900686, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 555/1000, MSE: 0.397054190727734, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 556/1000, MSE: 0.3968267442043013, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 557/1000, MSE: 0.3966004187325717, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 558/1000, MSE: 0.39637519211664013, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 559/1000, MSE: 0.3961510426412278, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
```

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Epoch 560/1000, MSE: 0.3959279490612523, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 561/1000, MSE: 0.39570589059162076, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 562/1000, MSE: 0.39548484689724295, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 563/1000, MSE: 0.3952647980832668, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 564/1000, MSE: 0.39504572468551913, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 565/1000, MSE: 0.39482760766115776, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 566/1000, MSE: 0.39461042837952964, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 567/1000, MSE: 0.3943941686132189, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
```

```
Epoch 568/1000, MSE: 0.39417881052929504, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 569/1000, MSE: 0.39396433668075287, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 570/1000, MSE: 0.3937507299981323, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 571/1000, MSE: 0.3935379737813258, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 572/1000, MSE: 0.3933260516915597, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 573/1000, MSE: 0.39311494774355177, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 574/1000, MSE: 0.39290464629783634, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 575/1000, MSE: 0.39269513205326156, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
```

```
Epoch 576/1000, MSE: 0.3924863900396431, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 577/1000, MSE: 0.39227840561058075, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 578/1000, MSE: 0.3920711644364309, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 579/1000, MSE: 0.3918646524974316, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 580/1000, MSE: 0.39165885607697515, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 581/1000, MSE: 0.39145376175502805, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 582/1000, MSE: 0.39124935640169406, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 583/1000, MSE: 0.3910456271709172, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
```

```
Epoch 584/1000, MSE: 0.39084256149431906, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 585/1000, MSE: 0.3906401470751729, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 586/1000, MSE: 0.39043837188250763, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 587/1000, MSE: 0.39023722414533846, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 588/1000, MSE: 0.3900366923470246, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 589/1000, MSE: 0.38983676521974825, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 590/1000, MSE: 0.3896374317391133, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 591/1000, MSE: 0.3894386811188619, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
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Epoch 592/1000, MSE: 0.389240502805708, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 593/1000, MSE: 0.3890428864742778, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 594/1000, MSE: 0.38884582202216283, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 595/1000, MSE: 0.38864929956508276, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 596/1000, MSE: 0.3884533094321485, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 597/1000, MSE: 0.3882578421612346, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 598/1000, MSE: 0.3880628884944411, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 599/1000, MSE: 0.3878684393736677, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
```

```
Epoch 600/1000, MSE: 0.38767448593627357, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 601/1000, MSE: 0.3874810195108362, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 602/1000, MSE: 0.3872880316130007, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 603/1000, MSE: 0.3870955139414193, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 604/1000, MSE: 0.38690345837378015, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 605/1000, MSE: 0.38671185696292126, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 606/1000, MSE: 0.38652070193302823, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 607/1000, MSE: 0.38632998567591453, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
```

```
Epoch 608/1000, MSE: 0.38613970074738774, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 609/1000, MSE: 0.3859498398636847, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 610/1000, MSE: 0.3857603958979921, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 611/1000, MSE: 0.3855713618770407, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 612/1000, MSE: 0.3853827309777713, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 613/1000, MSE: 0.38519449652407556, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 614/1000, MSE: 0.38500665198360695, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 615/1000, MSE: 0.38481919096466016, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
```

```
Epoch 616/1000, MSE: 0.3846321072131176, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 617/1000, MSE: 0.38444539460946564, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 618/1000, MSE: 0.3842590471658714, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 619/1000, MSE: 0.3840730590233262, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 620/1000, MSE: 0.38388742444884877, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 621/1000, MSE: 0.38370213783274976, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 622/1000, MSE: 0.3835171936859573, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 623/1000, MSE: 0.38333258663739833, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
```

```
Epoch 624/1000, MSE: 0.383148311431438, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 625/1000, MSE: 0.3829643629253735, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 626/1000, MSE: 0.38278073608698643, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 627/1000, MSE: 0.3825974259921402, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 628/1000, MSE: 0.3824144278224379, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 629/1000, MSE: 0.3822317368629273, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 630/1000, MSE: 0.3820493484998536, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 631/1000, MSE: 0.3818672582184658, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
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Epoch 632/1000, MSE: 0.3816854616008677, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 633/1000, MSE: 0.3815039543239149, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 634/1000, MSE: 0.38132273215715906, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 635/1000, MSE: 0.3811417909608375, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 636/1000, MSE: 0.38096112668390364, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 637/1000, MSE: 0.38078073536210233, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 638/1000, MSE: 0.38060061311608584, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 639/1000, MSE: 0.38042075614957355, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
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Epoch 640/1000, MSE: 0.38024116074754716, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 641/1000, MSE: 0.38006182327448773, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 642/1000, MSE: 0.3798827401726503, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 643/1000, MSE: 0.37970390796037795, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 644/1000, MSE: 0.3795253232304491, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 645/1000, MSE: 0.37934698264846134, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 646/1000, MSE: 0.37916888295125517, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 647/1000, MSE: 0.37899102094536313, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
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Epoch 648/1000, MSE: 0.3788133935055012, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 649/1000, MSE: 0.3786359975730884, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 650/1000, MSE: 0.3784588301547988, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 651/1000, MSE: 0.37828188832114573, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 652/1000, MSE: 0.37810516920509757, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 653/1000, MSE: 0.3779286700007209, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 654/1000, MSE: 0.3777523879618572, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 655/1000, MSE: 0.3775763204008234, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
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Epoch 656/1000, MSE: 0.37740046468714467, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 657/1000, MSE: 0.3772248182463128, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 658/1000, MSE: 0.37704937855857185, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 659/1000, MSE: 0.37687414315773055, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 660/1000, MSE: 0.3766991096299993, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 661/1000, MSE: 0.37652427561285406, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 662/1000, MSE: 0.37634963879392413, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 663/1000, MSE: 0.37617519690990375, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
```

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Epoch 664/1000, MSE: 0.3760009477454881, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 665/1000, MSE: 0.37582688913233064, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 666/1000, MSE: 0.37565301894802555, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 667/1000, MSE: 0.37547933511511167, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 668/1000, MSE: 0.37530583560009495, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 669/1000, MSE: 0.3751325184124985, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 670/1000, MSE: 0.3749593816039255, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 671/1000, MSE: 0.37478642326714845, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
```

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Epoch 672/1000, MSE: 0.3746136415352165, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 673/1000, MSE: 0.37444103458058037, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 674/1000, MSE: 0.37426860061423817, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 675/1000, MSE: 0.3740963378848995, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 676/1000, MSE: 0.37392424467816715, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 677/1000, MSE: 0.3737523193157381, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 678/1000, MSE: 0.3735805601546175, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 679/1000, MSE: 0.3734089655863561, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
```

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Epoch 680/1000, MSE: 0.3732375340363006, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 681/1000, MSE: 0.3730662639628577, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 682/1000, MSE: 0.3728951538567806, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 683/1000, MSE: 0.3727242022404652, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 684/1000, MSE: 0.37255340766726514, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 685/1000, MSE: 0.3723827687208193, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 686/1000, MSE: 0.3722122840143959, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 687/1000, MSE: 0.3720419521902498, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
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Epoch 688/1000, MSE: 0.37187177191899323, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 689/1000, MSE: 0.3717017418989811, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 690/1000, MSE: 0.37153186085570994, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 691/1000, MSE: 0.37136212754122877, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 692/1000, MSE: 0.3711925407335647, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 693/1000, MSE: 0.371023099236156, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 694/1000, MSE: 0.3708538018773061, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 695/1000, MSE: 0.37068464750963953, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
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Epoch 696/1000, MSE: 0.370515635009579, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 697/1000, MSE: 0.37034676327682564, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 698/1000, MSE: 0.37017803123385684, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 699/1000, MSE: 0.3700094378254323, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 700/1000, MSE: 0.36984098201810855, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 701/1000, MSE: 0.36967266279976957, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 702/1000, MSE: 0.369504479179162, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 703/1000, MSE: 0.36933643018544454, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
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Epoch 704/1000, MSE: 0.36916851486774405, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 705/1000, MSE: 0.3690007322947242, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 706/1000, MSE: 0.3688330815541605, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 707/1000, MSE: 0.3686655617525282, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 708/1000, MSE: 0.36849817201459334, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 709/1000, MSE: 0.36833091148301983, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 710/1000, MSE: 0.36816377931798006, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 711/1000, MSE: 0.3679967746967756, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
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Epoch 712/1000, MSE: 0.367829896813466, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
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Epoch 713/1000, MSE: 0.36766314487850454, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 714/1000, MSE: 0.36749651811838674, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 716/1000, MSE: 0.3671636371067718, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 717/1000, MSE: 0.36699738138537025, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 718/1000, MSE: 0.3668312478983423, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 719/1000, MSE: 0.3666652359473141, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
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Epoch 720/1000, MSE: 0.3664993448479755, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 721/1000, MSE: 0.36633357392977683, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 722/1000, MSE: 0.36616792253562863, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 723/1000, MSE: 0.3660023900216114, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 724/1000, MSE: 0.3658369757566901, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 725/1000, MSE: 0.36567167912243553, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 726/1000, MSE: 0.36550649951275005, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 727/1000, MSE: 0.36534143633360183, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
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Epoch 728/1000, MSE: 0.36517648900276173, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 729/1000, MSE: 0.3650116569495508, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 730/1000, MSE: 0.36484693961458675, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 731/1000, MSE: 0.3646823364495416, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 732/1000, MSE: 0.36451784691690137, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 733/1000, MSE: 0.3643534704897322, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 734/1000, MSE: 0.3641892066514514, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 735/1000, MSE: 0.36402505489560216, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
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Epoch 736/1000, MSE: 0.36386101472563653, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 737/1000, MSE: 0.3636970856547004, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 738/1000, MSE: 0.3635332672054209, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 739/1000, MSE: 0.3633695589097057, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 740/1000, MSE: 0.3632059603085375, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 741/1000, MSE: 0.36304247095178177, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 742/1000, MSE: 0.3628790903979923, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 743/1000, MSE: 0.3627158182142232, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
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Epoch 744/1000, MSE: 0.36255265397584513, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 745/1000, MSE: 0.3623895972663665, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 746/1000, MSE: 0.3622266476772555, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 747/1000, MSE: 0.36206380480777056, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 748/1000, MSE: 0.3619010682647881, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 749/1000, MSE: 0.36173843766264235, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 750/1000, MSE: 0.3615759126229587, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 751/1000, MSE: 0.361413492774502, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
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Epoch 752/1000, MSE: 0.36125117775301724, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 753/1000, MSE: 0.36108896720108064, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 754/1000, MSE: 0.36092686076795294, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 755/1000, MSE: 0.3607648581094326, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 756/1000, MSE: 0.36060295888771576, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 757/1000, MSE: 0.3604411627712588, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 758/1000, MSE: 0.3602794694346417, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 759/1000, MSE: 0.3601178785584359, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
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Epoch 760/1000, MSE: 0.3599563898290744, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 761/1000, MSE: 0.35979500293872807, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 762/1000, MSE: 0.35963371758517704, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 763/1000, MSE: 0.3594725334716931, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 764/1000, MSE: 0.3593114503069195, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 765/1000, MSE: 0.35915046780475585, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 766/1000, MSE: 0.3589895856842434, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 767/1000, MSE: 0.3588288036694547, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
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Epoch 768/1000, MSE: 0.35866812148938626, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 769/1000, MSE: 0.35850753887784925, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 770/1000, MSE: 0.35834705557336916, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 771/1000, MSE: 0.35818667131908044, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 772/1000, MSE: 0.3580263858626304, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 773/1000, MSE: 0.35786619895607974, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 774/1000, MSE: 0.3577061103558067, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 775/1000, MSE: 0.35754611982241774, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
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Epoch 776/1000, MSE: 0.3573862271206513, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 777/1000, MSE: 0.35722643201929266, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 778/1000, MSE: 0.35706673429108343, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 779/1000, MSE: 0.35690713371264066, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 780/1000, MSE: 0.35674763006436777, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 781/1000, MSE: 0.35658822313037813, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 782/1000, MSE: 0.3564289126984112, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 783/1000, MSE: 0.3562696985597567, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
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Epoch 784/1000, MSE: 0.3561105805091775, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 785/1000, MSE: 0.3559515583448351, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 786/1000, MSE: 0.3557926318682154, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 787/1000, MSE: 0.35563380088405777, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 788/1000, MSE: 0.3554750652002857, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 789/1000, MSE: 0.3553164246279376, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 790/1000, MSE: 0.35515787898109935, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 791/1000, MSE: 0.3549994280768397, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
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Epoch 792/1000, MSE: 0.354841071735145, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
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Epoch 793/1000, MSE: 0.3546828097788578, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 794/1000, MSE: 0.3545246420336147, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 795/1000, MSE: 0.354366568327786, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 796/1000, MSE: 0.35420858849241676, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 797/1000, MSE: 0.3540507023611708, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 798/1000, MSE: 0.3538929097702728, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 799/1000, MSE: 0.3537352105584537, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
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Epoch 800/1000, MSE: 0.35357760456689874, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 801/1000, MSE: 0.3534200916391913, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 802/1000, MSE: 0.35326267162126396, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 803/1000, MSE: 0.35310534436134744, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 804/1000, MSE: 0.35294810970992124, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 805/1000, MSE: 0.3527909675196661, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 806/1000, MSE: 0.3526339176454153, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 807/1000, MSE: 0.3524769599441094, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
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Epoch 808/1000, MSE: 0.3523200942747522, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 809/1000, MSE: 0.35216332049836335, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 810/1000, MSE: 0.352006638477939, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
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Epoch 811/1000, MSE: 0.3518500480784072, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 812/1000, MSE: 0.3516935491665864, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 813/1000, MSE: 0.35153714161114696, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 814/1000, MSE: 0.3513808252825687, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 815/1000, MSE: 0.3512246000531044, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
```

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Epoch 816/1000, MSE: 0.3510684657967416, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 817/1000, MSE: 0.3509124223891648, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 818/1000, MSE: 0.3507564697077194, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 819/1000, MSE: 0.3506006076313764, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 820/1000, MSE: 0.35044483604069804, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 821/1000, MSE: 0.3502891548178026, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 822/1000, MSE: 0.35013356384633315, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 823/1000, MSE: 0.3499780630114231, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
```

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Epoch 824/1000, MSE: 0.3498226521996653, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 825/1000, MSE: 0.34966733129908184, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 826/1000, MSE: 0.3495121001990918, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 827/1000, MSE: 0.3493569587904821, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 828/1000, MSE: 0.3492019069653801, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 829/1000, MSE: 0.3490469446172214, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 830/1000, MSE: 0.34889207164072655, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 831/1000, MSE: 0.3487372879318701, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
```

```
Epoch 832/1000, MSE: 0.34858259338785547, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 833/1000, MSE: 0.3484279879070892, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 834/1000, MSE: 0.34827347138915443, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 835/1000, MSE: 0.34811904373478597, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 836/1000, MSE: 0.3479647048458473, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 837/1000, MSE: 0.3478104546253053, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 838/1000, MSE: 0.3476562929772072, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 839/1000, MSE: 0.3475022198066568, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
```

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Epoch 840/1000, MSE: 0.3473482350197943, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 841/1000, MSE: 0.3471943385237729, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 842/1000, MSE: 0.34704053022673703, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 843/1000, MSE: 0.34688681003780225, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 844/1000, MSE: 0.34673317786703456, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 845/1000, MSE: 0.3465796336254303, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 846/1000, MSE: 0.3464261772248964, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 847/1000, MSE: 0.34627280857823056, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
```

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Epoch 848/1000, MSE: 0.34611952759910464, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 849/1000, MSE: 0.34596633420204337, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 850/1000, MSE: 0.34581322830240857, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 851/1000, MSE: 0.34566020981638057, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 852/1000, MSE: 0.3455072786609419, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 853/1000, MSE: 0.3453544347538578, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 854/1000, MSE: 0.3452016780136656, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 855/1000, MSE: 0.3450490083596503, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
```

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Epoch 856/1000, MSE: 0.3448964257118364, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 857/1000, MSE: 0.3447439299909677, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 858/1000, MSE: 0.3445915211184956, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 859/1000, MSE: 0.3444391990165612, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 860/1000, MSE: 0.3442869636079821, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 861/1000, MSE: 0.3441348148162397, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 862/1000, MSE: 0.34398275256546323, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 863/1000, MSE: 0.3438307767804183, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
```

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Epoch 864/1000, MSE: 0.34367888738649105, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 865/1000, MSE: 0.3435270843096776, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 866/1000, MSE: 0.34337536747657077, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 867/1000, MSE: 0.3432237368143467, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 868/1000, MSE: 0.34307219225075325, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 869/1000, MSE: 0.3429207337140997, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 870/1000, MSE: 0.34276936113324297, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 871/1000, MSE: 0.3426180744375772, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
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Epoch 872/1000, MSE: 0.3424668735570224, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 873/1000, MSE: 0.3423157584220143, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 874/1000, MSE: 0.3421647289634932, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 875/1000, MSE: 0.34201378511289254, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 876/1000, MSE: 0.34186292680213104, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 877/1000, MSE: 0.34171215396360144, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 878/1000, MSE: 0.3415614665301596, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 879/1000, MSE: 0.3414108644351179, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
```

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Epoch 880/1000, MSE: 0.341260347612233, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 881/1000, MSE: 0.34110991599569834, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 882/1000, MSE: 0.34095956952013573, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 883/1000, MSE: 0.34080930812058424, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 884/1000, MSE: 0.34065913173249396, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 885/1000, MSE: 0.3405090402917174, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 886/1000, MSE: 0.3403590337344997, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 887/1000, MSE: 0.3402091119974725, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
```

```
Epoch 888/1000, MSE: 0.3400592750176467, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 889/1000, MSE: 0.3399095227323998, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 890/1000, MSE: 0.33975985507947654, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 891/1000, MSE: 0.33961027199697325, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 892/1000, MSE: 0.33946077342333747, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 893/1000, MSE: 0.33931135929735673, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 894/1000, MSE: 0.339162029558153, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 895/1000, MSE: 0.33901278414517716, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
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Epoch 896/1000, MSE: 0.3388636229981996, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 897/1000, MSE: 0.33871454605730744, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 898/1000, MSE: 0.33856555326289445, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 899/1000, MSE: 0.3384166445556582, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 900/1000, MSE: 0.338267819876592, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 901/1000, MSE: 0.33811907916698036, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 902/1000, MSE: 0.33797042236839137, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 903/1000, MSE: 0.33782184942267246, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
```

```
Epoch 904/1000, MSE: 0.3376733602719461, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 905/1000, MSE: 0.3375249548586019, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 906/1000, MSE: 0.3373766331252916, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 907/1000, MSE: 0.3372283950149267, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 908/1000, MSE: 0.3370802404706706, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 909/1000, MSE: 0.33693216943593385, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 910/1000, MSE: 0.3367841818543703, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 911/1000, MSE: 0.3366362776698735, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
```

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Epoch 912/1000, MSE: 0.33648845682656875, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 913/1000, MSE: 0.3363407192688113, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 914/1000, MSE: 0.3361930649411814, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 915/1000, MSE: 0.33604549378847903, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 916/1000, MSE: 0.3358980057557214, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 917/1000, MSE: 0.3357506007881365, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 918/1000, MSE: 0.3356032788311613, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 919/1000, MSE: 0.3354560398304356, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
```

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Epoch 920/1000, MSE: 0.33530888373180134, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 921/1000, MSE: 0.3351618104812945, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 922/1000, MSE: 0.33501482002514515, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 923/1000, MSE: 0.3348679123097714, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 924/1000, MSE: 0.3347210872817779, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 925/1000, MSE: 0.33457434488795035, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 926/1000, MSE: 0.33442768507525344, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 927/1000, MSE: 0.3342811077908271, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
```

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Epoch 928/1000, MSE: 0.3341346129819829, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 929/1000, MSE: 0.3339882005962011, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 930/1000, MSE: 0.3338418705811283, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 931/1000, MSE: 0.3336956228845732, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 932/1000, MSE: 0.33354945745450437, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 933/1000, MSE: 0.33340337423904676, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 934/1000, MSE: 0.33325737318647985, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 935/1000, MSE: 0.33311145424523325, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
```

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Epoch 936/1000, MSE: 0.33296561736388536, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 937/1000, MSE: 0.3328198624911607, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 938/1000, MSE: 0.33267418957592626, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 939/1000, MSE: 0.33252859856718925, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 940/1000, MSE: 0.3323830894140952, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 941/1000, MSE: 0.3322376620659254, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 942/1000, MSE: 0.33209231647209425, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 943/1000, MSE: 0.33194705258214635, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
```

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Epoch 944/1000, MSE: 0.33180187034575526, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 945/1000, MSE: 0.33165676971272046, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 946/1000, MSE: 0.33151175063296584, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 947/1000, MSE: 0.33136681305653704, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 948/1000, MSE: 0.33122195693359896, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 949/1000, MSE: 0.3310771822144349, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 950/1000, MSE: 0.330932488849444, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 951/1000, MSE: 0.3307878767891379, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
```

```
Epoch 952/1000, MSE: 0.33064334598414136, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 953/1000, MSE: 0.3304988963851882, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 954/1000, MSE: 0.3303545279431212, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 955/1000, MSE: 0.3302102406088886, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 956/1000, MSE: 0.3300660343335432, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 957/1000, MSE: 0.32992190906824115, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 958/1000, MSE: 0.32977786476423915, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 959/1000, MSE: 0.3296339013728928, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
```

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Epoch 960/1000, MSE: 0.32949001884565693, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 961/1000, MSE: 0.3293462171340813, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 962/1000, MSE: 0.32920249618981157, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 963/1000, MSE: 0.3290588559645848, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 964/1000, MSE: 0.32891529641023104, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 965/1000, MSE: 0.3287718174786702, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 966/1000, MSE: 0.32862841912191065, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 967/1000, MSE: 0.32848510129204894, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
```

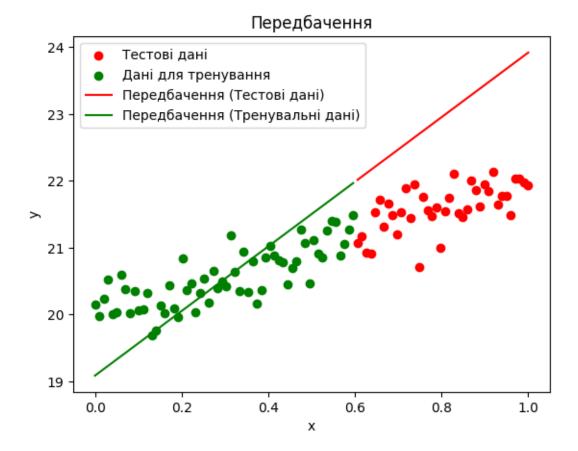
```
Epoch 968/1000, MSE: 0.32834186394126647, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 969/1000, MSE: 0.32819870702183074, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 970/1000, MSE: 0.32805563048609104, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 971/1000, MSE: 0.3279126342864804, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 972/1000, MSE: 0.3277697183755112, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 973/1000, MSE: 0.32762688270577606, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 974/1000, MSE: 0.3274841272299475, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 975/1000, MSE: 0.32734145190077235, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
```

```
Epoch 976/1000, MSE: 0.3271988566710763, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 977/1000, MSE: 0.3270563414937578, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 978/1000, MSE: 0.32691390632179135, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 979/1000, MSE: 0.3267715511082231, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 980/1000, MSE: 0.32662927580617107, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 981/1000, MSE: 0.3264870803688243, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 982/1000, MSE: 0.32634496474944064, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 983/1000, MSE: 0.32620292890134844, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \  \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0. \ \, 0.
```

```
Epoch 984/1000, MSE: 0.3260609727779428, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 985/1000, MSE: 0.32591909633268545, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 986/1000, MSE: 0.3257772995191048, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 987/1000, MSE: 0.3256355822907941, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 988/1000, MSE: 0.3254939446014101, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 989/1000, MSE: 0.32535238640467334, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 990/1000, MSE: 0.3252109076543674, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 991/1000, MSE: 0.32506950830433606, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
```

```
Epoch 992/1000, MSE: 0.32492818830848585, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 993/1000, MSE: 0.3247869476207813, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 994/1000, MSE: 0.324645786195248, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 995/1000, MSE: 0.3245047039859686, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 996/1000, MSE: 0.3243637009470842, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 997/1000, MSE: 0.3242227770327928, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 998/1000, MSE: 0.32408193219734843, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
Epoch 999/1000, MSE: 0.32394116639506143, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
```

```
Epoch 1000/1000, MSE: 0.3238004795802963, Weights: [0. 0. 0. 0. 0. 0. 0. 0. 0.
   [35]: test_data = np.loadtxt('lab_1_test.csv', delimiter=',', skiprows=1)
   x_test = test_data[:, 1]
   y_test = test_data[:, 2]
   predictions_test = linear_regression(x_test, m, b)
   predictions_train = linear_regression(x_train, m, b)
   # d.
                     lab1 train.csv, lab1 test.csv
   plt.scatter(x_test, y_test, color='red', label='
                                          ')
   plt.scatter(x_train, y_train, color='green', label='
   plt.plot(x_test, predictions_test, color='red', label='
                                               )')
   plt.plot(x_train, predictions_train, color='green', label='
                                                   )')
                                            (
   plt.xlabel('x')
   plt.ylabel('y')
   plt.title('
              ')
   plt.legend()
   plt.show()
```



Mean Squared Error on Test Set: 2.0704211311771585