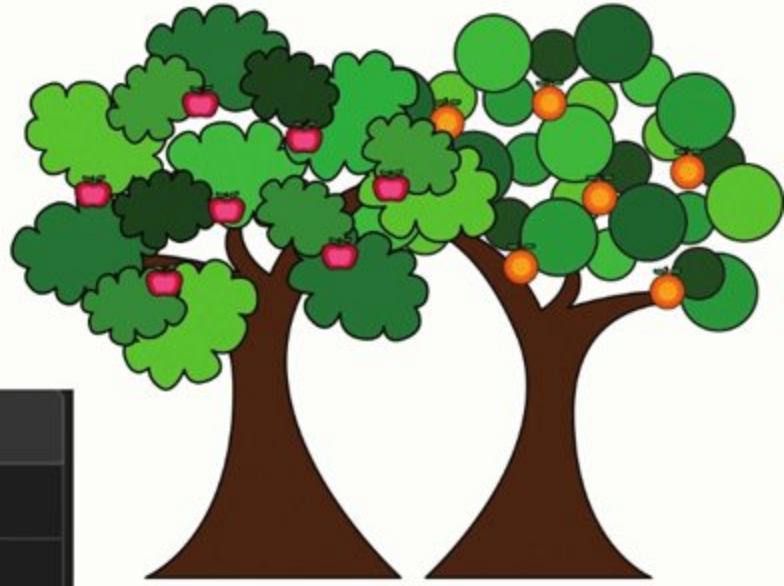
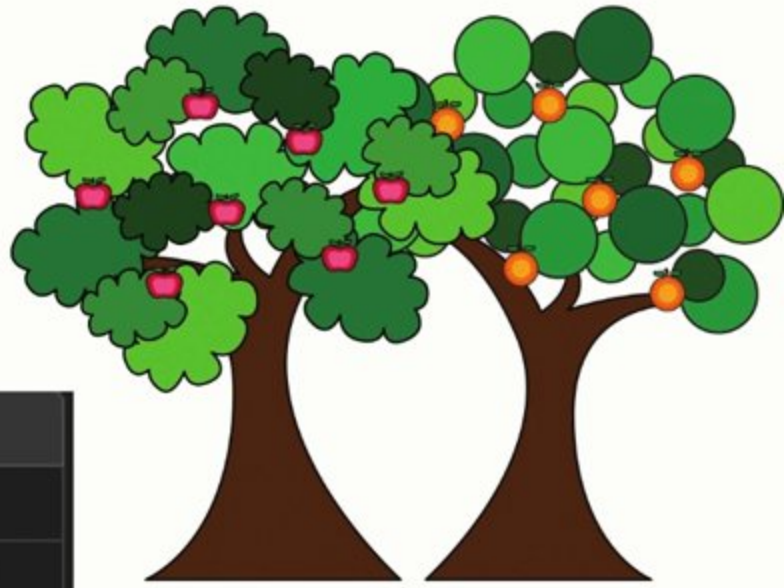
DATASET



Index	Temperature	Rainfall	Humidity	Apples	Oranges	Cities
0	73	67	43	56	70	New York
1	91	88	64	81	101	Los Angeles
2	87	134	58	119	133	Chicago
3	102	43	37	22	37	Houston
4	69	96	70	103	119	Phoenix
5	85	100	60	98	110	Philadelphia
6	95	80	55	88	95	San Antonio
7	105	120	75	115	140	San Diego
8	78	90	50	76	85	Dallas
9	82	70	45	65	75	Austin

DATASET



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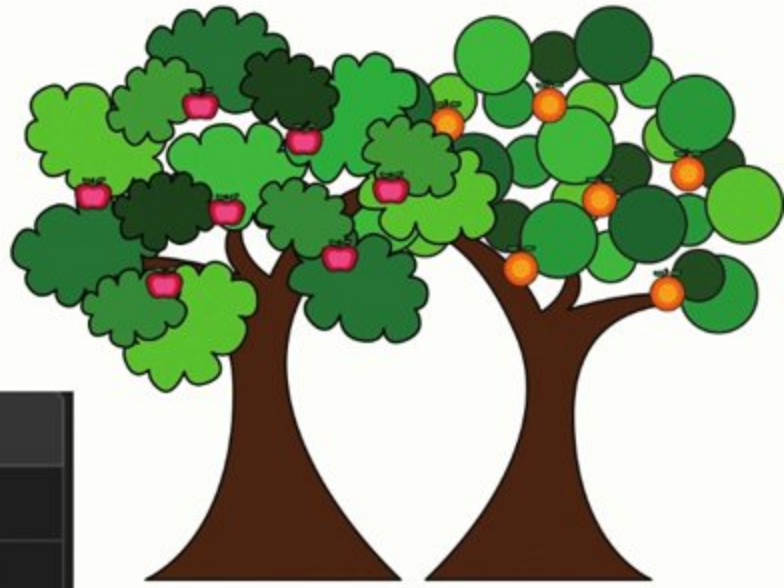
DATASET



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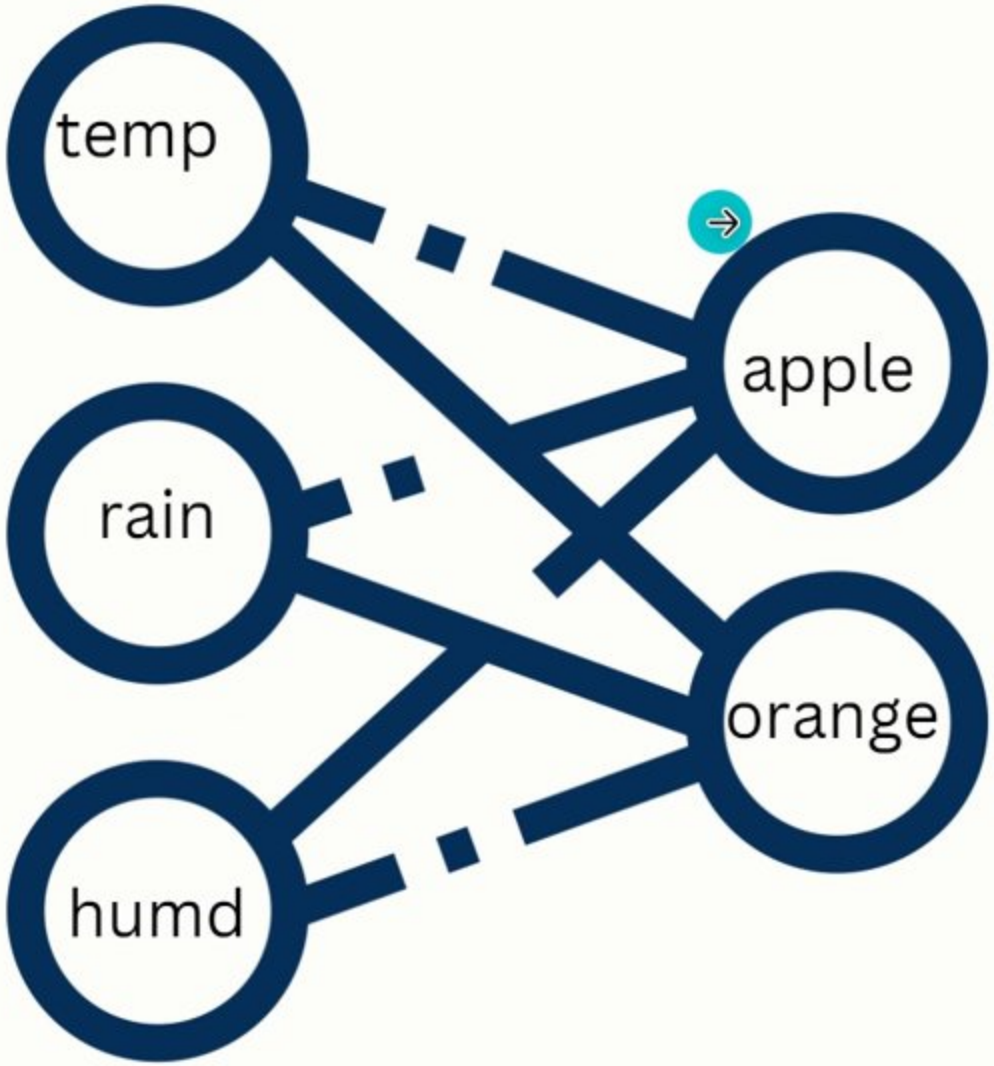
SIMPLE NEURAL NETWORK



Pytorch.ipynb - Colab

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Connect T4 Gemini

Basic Neural Network

```
import torch
import numpy as np

# Input (temp, rainfall, humidity)
inputs = np.array([[73, 67, 43],
                   [91, 88, 64],
                   [87, 134, 58],
                   [102, 43, 37],
                   [69, 96, 70],
                   [85, 100, 60],
                   [95, 80, 55],
                   [105, 120, 75],
                   [78, 90, 50],
                   [82, 70, 45]], dtype='float32')

# Targets (apples, oranges)
targets = np.array([[56, 70],
                    [81, 101],
                    [119, 133],
                    [22, 37],
                    [103, 119],
                    [98, 110],
```

Pytorch.ipynb - Colab

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T4 RAM Disk

Gemini

7s

```
                    [102, 43, 37],
                    [69, 96, 70],
                    [85, 100, 60],
                    [95, 80, 55],
                    [105, 120, 75],
                    [78, 90, 50],
                    [82, 70, 45]], dtype='float32')

# Targets (apples, oranges)
targets = np.array([[56, 70],
                    [81, 101],
                    [119, 133],
                    [22, 37],
                    [103, 119],
                    [98, 110],
                    [88, 95],
                    [115, 140],
                    [76, 85],
                    [65, 75]], dtype='float32')
```

[ ] Start coding or generate with AI.

[ ] Start coding or generate with AI.

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AISCIENCES

Pytorch.ipynb - Colab

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T4 RAM Disk Gemini

[1] 7s

```
                    [105, 120, 75],
                    [78, 90, 50],
                    [82, 70, 45]], dtype='float32')

# Targets (apples, oranges)
targets = np.array([[56, 70],
                    [81, 101],
                    [119, 133],
                    [22, 37],
                    [103, 119],
                    [98, 110],
                    [88, 95],
                    [115, 140],
                    [76, 85],
                    [65, 75]], dtype='float32')
```

```
inputs = torch.from_numpy(inputs)
targets = torch.from_numpy(targets)
```

[ ] Start coding or generate with AI.

[ ] Start coding or generate with AI.

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Pytorch.ipynb - Colab

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T4 RAM Disk Gemini

[1] 7s

```
                    [105, 120, 75],
                    [78, 90, 50],
                    [82, 70, 45]], dtype='float32')

# Targets (apples, oranges)
targets = np.array([[56, 70],
                    [81, 101],
                    [119, 133],
                    [22, 37],
                    [103, 119],
                    [98, 110],
                    [88, 95],
                    [115, 140],
                    [76, 85],
                    [65, 75]], dtype='float32')
```

```
inputs = torch.from_numpy(inputs)
targets = torch.from_numpy(targets)
```

[ ] Start coding or generate with AI.

[ ] Start coding or generate with AI.

✓ 7s completed at 7:09 PM

Pytorch.ipynb - Colab

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T4 RAM Disk

Gemini

```
inputs = torch.from_numpy(inputs)
targets = torch.from_numpy(targets)
print(inputs)
print(targets)
```

```
tensor([[ 73.,  67.,  43.],
        [ 91.,  88.,  64.],
        [ 87., 134.,  58.],
        [102.,  43.,  37.],
        [ 69.,  96.,  70.],
        [ 85., 100.,  60.],
        [ 95.,  80.,  55.],
        [105., 120.,  75.],
        [ 78.,  90.,  50.],
        [ 82.,  70.,  45.]])
tensor([[ 56.,  70.],
        [ 81., 101.],
        [119., 133.],
        [ 22.,  37.],
        [103., 119.],
        [ 98., 110.],
        [ 88.,  95.],
        [115., 140.],
        [ 76.,  85.],
        [ 65.,  75.]])
```

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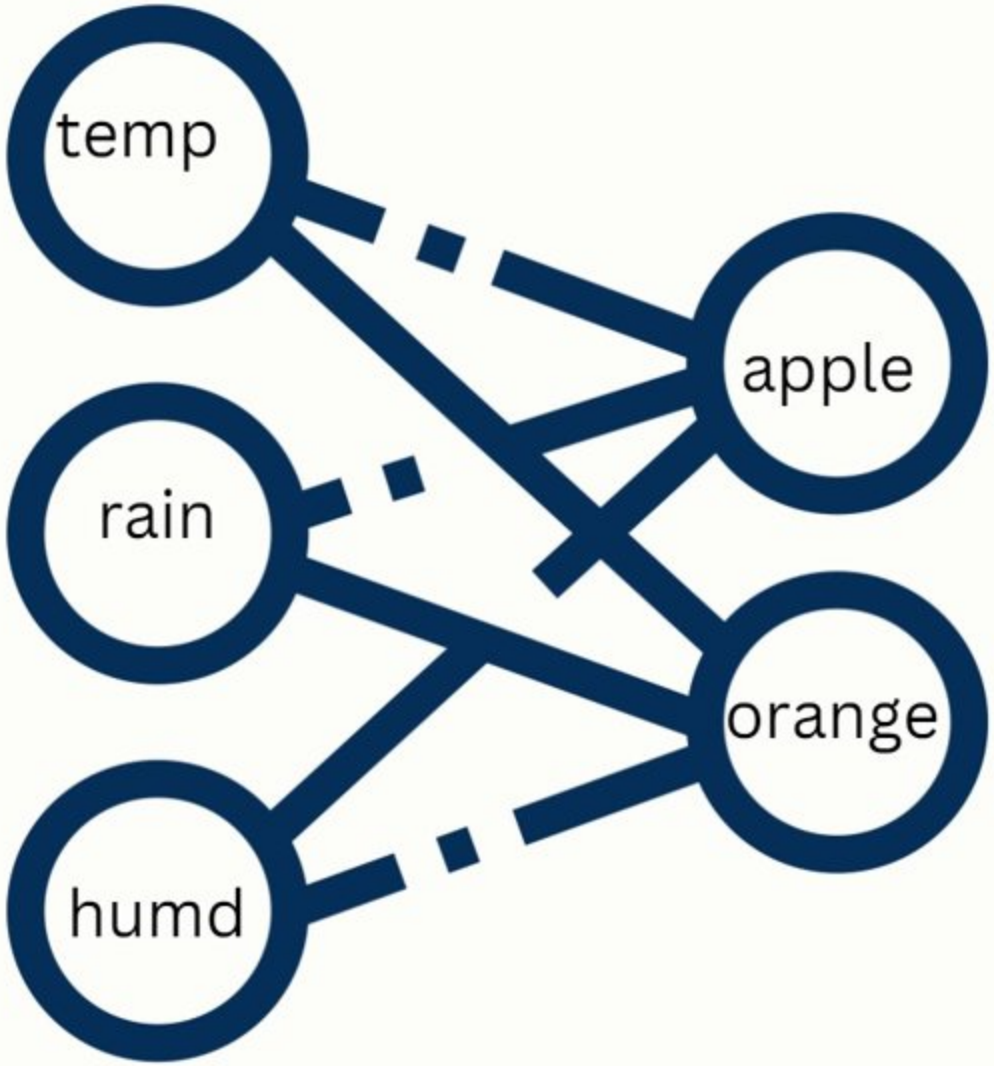
AISCIENCES

11 / 14

udemy

SIMPLE NEURAL NETWORK



Pytorch.ipynb - Colab

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T4 RAM Disk Gemini

```
[2]
        [ 82.,  70.,  45.]])
tensor([[ 56.,  70.],
        [ 81., 101.],
        [119., 133.],
        [ 22.,  37.],
        [103., 119.],
        [ 98., 110.],
        [ 88.,  95.],
        [115., 140.],
        [ 76.,  85.],
        [ 65.,  75.]])
```

```
w = torch.randn(3,2, requires_grad=True)
b = torch.randn(2, requires_grad=True)
print(w)
print(b)
```

```
tensor([[ 0.3865,  0.6463],
        [ 0.6664,  0.2998],
        [ 1.5070, -0.1798]], requires_grad=True)
tensor([ 0.8740, -0.7764], requires_grad=True)
```

[ ] Start coding or generate with AI.

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