

## MLP SoME 8 big fixes Results

--- Starting Experiment: v3\_baseline\_orthogonal ---

--- Part 2: Data Preparation & Configuration ---

## Training custom tokenizer...

## README.md:

```
1.06k? [00:00<00:00, 97.9kB/s]
data/train-00000-of-00004-2d5a1467fff108(...): 100%
249M/249M [00:02<00:00, 155MB/s]
data/train-00001-of-00004-5852b56a2bd28f(...): 100%
248M/248M [00:01<00:00, 247MB/s]
data/train-00002-of-00004-a26307300439e9(...): 100%
246M/246M [00:01<00:00, 120MB/s]
data/train-00003-of-00004-d243063613e5a0(...): 100%
248M/248M [00:01<00:00, 186MB/s]
data/validation-00000-of-00001-869c898b5(...): 100%
9.99M/9.99M [00:00<00:00, 13.6MB/s]
Generating train split: 100%
2119719/2119719 [00:06<00:00, 332858.38 examples/s]
Generating validation split: 100%
21990/21990 [00:00<00:00, 298206.05 examples/s]
Custom tokenizer loaded with vocab size: 8192
```

## Tokenizing dataset...

```
Map (num_proc=12): 100%
 10000/10000 [00:03<00:00, 5454.01 examples/s]
Map (num_proc=12): 100%
 1000/1000 [00:00<00:00, 1614.70 examples/s]
Train dataset size (subset): 10000
Using 6 workers for DataLoader.
```

### --- Part 3: Model Definition ---

SoME Layer Ablation Flags: {'use\_alpha': True, 'use\_beta': True, 'use\_delta': True}

Compiling the model for faster training...

```
/tmp/ipython-input-310555793.py:454: FutureWarning: `torch.cuda.amp.GradScaler(args...)` is
deprecated. Please use `torch.amp.GradScaler('cuda', args...)` instead.

scaler = torch.cuda.amp.GradScaler()
```

--- Part 4: Training, Evaluation, and Metrics ---

Total parameters: 2711.81M

Trainable parameters: 24.18M (0.89%)

Total training steps: 1664

Using expert initialization method: sparse

--- Epoch 1/4 ---

```
Training: 0% | 0/416 [00:00<?, ?it/s]/tmp/ipython-input-310555793.py:462:
```

```
FutureWarning: `torch.cuda.amp.autocast(args...)` is deprecated. Please use
`torch.amp.autocast('cuda', args...)` instead.
```

```
    with torch.cuda.amp.autocast():
```

```
Training: 0% | 1/416 [00:38<4:24:12, 38.20s/it, loss=9.1895,
```

```
lr=6.0e-04]/tmp/ipython-input-310555793.py:462: FutureWarning:
```

```
`torch.cuda.amp.autocast(args...)` is deprecated. Please use `torch.amp.autocast('cuda',
args...)` instead.
```

```
    with torch.cuda.amp.autocast():
```

```
Training: 0% | 2/416 [00:41<2:02:13, 17.71s/it, loss=8.5270,
```

```
lr=6.0e-04]/tmp/ipython-input-310555793.py:462: FutureWarning:
```

```
`torch.cuda.amp.autocast(args...)` is deprecated. Please use `torch.amp.autocast('cuda',
args...)` instead.
```

```
    with torch.cuda.amp.autocast():
```

```
Training: 1% | 5/416 [00:44<31:34, 4.61s/it, loss=7.2839,
```

```
lr=6.0e-04]/tmp/ipython-input-310555793.py:462: FutureWarning:
```

```
`torch.cuda.amp.autocast(args...)` is deprecated. Please use `torch.amp.autocast('cuda',
args...)` instead.
```

```
    with torch.cuda.amp.autocast():
```

```
Evaluating: 0% | 0/42 [00:00<?, ?it/s]/tmp/ipython-input-310555793.py:495:
```

```
FutureWarning: `torch.cuda.amp.autocast(args...)` is deprecated. Please use
`torch.amp.autocast('cuda', args...)` instead.
```

```
    with torch.cuda.amp.autocast():
```

```
Evaluating: 2% | 1/42 [00:07<04:59, 7.30s/it,
```

```
loss=3.2004]/tmp/ipython-input-310555793.py:495: FutureWarning:
```

```
`torch.cuda.amp.autocast(args...)` is deprecated. Please use `torch.amp.autocast('cuda',
args...)` instead.
```

```
with torch.cuda.amp.autocast():
```

```
Epoch 1: Train Loss = 4.2707, Val Loss = 3.4367, Val Perplexity = 31.09
```

```
Middle Layer (count): Gini = 0.492, Entropy = 6.355
```

```
Middle Layer (mass): Gini = 0.491, Entropy = 6.357
```

```
/tmp/ipython-input-310555793.py:454: FutureWarning: `torch.cuda.amp.GradScaler(args...)` is  
deprecated. Please use `torch.amp.GradScaler('cuda', args...)` instead.
```

```
scaler = torch.cuda.amp.GradScaler()
```

```
Model saved as best_model_v3_baseline_orthogonal_fixed.pth
```

```
--- Epoch 2/4 ---
```

```
Training: 0% | 0/416 [00:00<?, ?it/s]/tmp/ipython-input-310555793.py:462:
```

```
FutureWarning: `torch.cuda.amp.autocast(args...)` is deprecated. Please use
```

```
`torch.amp.autocast('cuda', args...)` instead.
```

```
with torch.cuda.amp.autocast():
```

```
Evaluating: 0% | 0/42 [00:00<?, ?it/s]/tmp/ipython-input-310555793.py:495:
```

```
FutureWarning: `torch.cuda.amp.autocast(args...)` is deprecated. Please use
```

```
`torch.amp.autocast('cuda', args...)` instead.
```

```
with torch.cuda.amp.autocast():
```

```
Epoch 2: Train Loss = 3.2273, Val Loss = 3.0392, Val Perplexity = 20.89
```

```
Middle Layer (count): Gini = 0.569, Entropy = 6.175
```

```
Middle Layer (mass): Gini = 0.568, Entropy = 6.176
```

```
Model saved as best_model_v3_baseline_orthogonal_fixed.pth
```

```
--- Epoch 3/4 ---
```

```
Epoch 3: Train Loss = 2.8759, Val Loss = 2.8767, Val Perplexity = 17.76
```

```
Middle Layer (count): Gini = 0.545, Entropy = 6.243
```

```
Middle Layer (mass): Gini = 0.544, Entropy = 6.245
```

```
Model saved as best_model_v3_baseline_orthogonal_fixed.pth
```

```
--- Epoch 4/4 ---
```

```
Epoch 4: Train Loss = 2.6881, Val Loss = 2.8424, Val Perplexity = 17.16
```

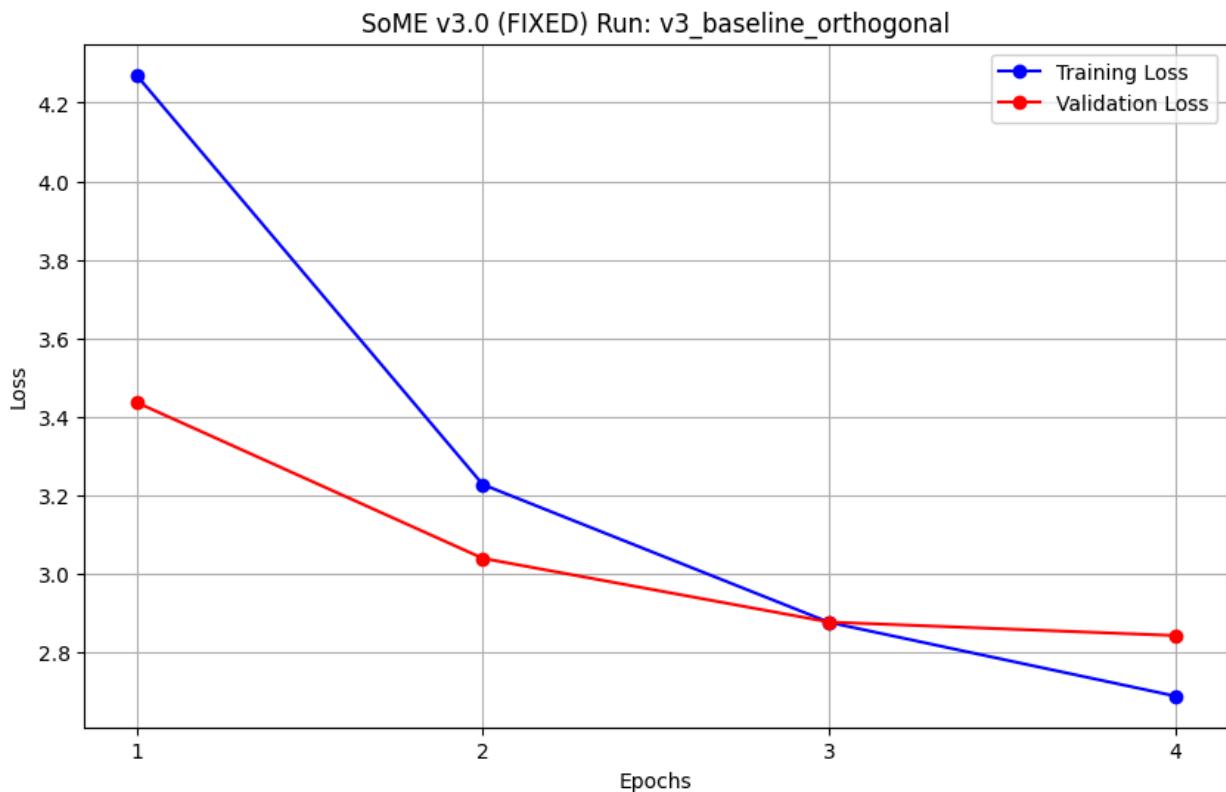
```
Middle Layer (count): Gini = 0.531, Entropy = 6.277
```

```
Middle Layer (mass): Gini = 0.530, Entropy = 6.279
```

```
Model saved as best_model_v3_baseline_orthogonal_fixed.pth
```

```
--- Training Complete for v3_baseline_orthogonal ---
```

Loss curve plot saved to loss\_curve\_v3\_baseline\_orthogonal\_fixed.png



---

#### --- Part 1: Dashboard Setup ---

Loading best model from: best\_model\_v3\_baseline\_orthogonal\_fixed.pth

Loading tokenizer from: tinystories-tokenizer-v2.json

SoME Layer Ablation Flags: {'use\_alpha': True, 'use\_beta': True, 'use\_delta': True}

SoME Layer Ablation Flags: {'use\_alpha': True, 'use\_beta': True, 'use\_delta': True}

SoME Layer Ablation Flags: {'use\_alpha': True, 'use\_beta': True, 'use\_delta': True}

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SoME Layer Ablation Flags: {'use\_alpha': True, 'use\_beta': True, 'use\_delta': True}

SoME Layer Ablation Flags: {'use\_alpha': True, 'use\_beta': True, 'use\_delta': True}

SoME Layer Ablation Flags: {'use\_alpha': True, 'use\_beta': True, 'use\_delta': True}

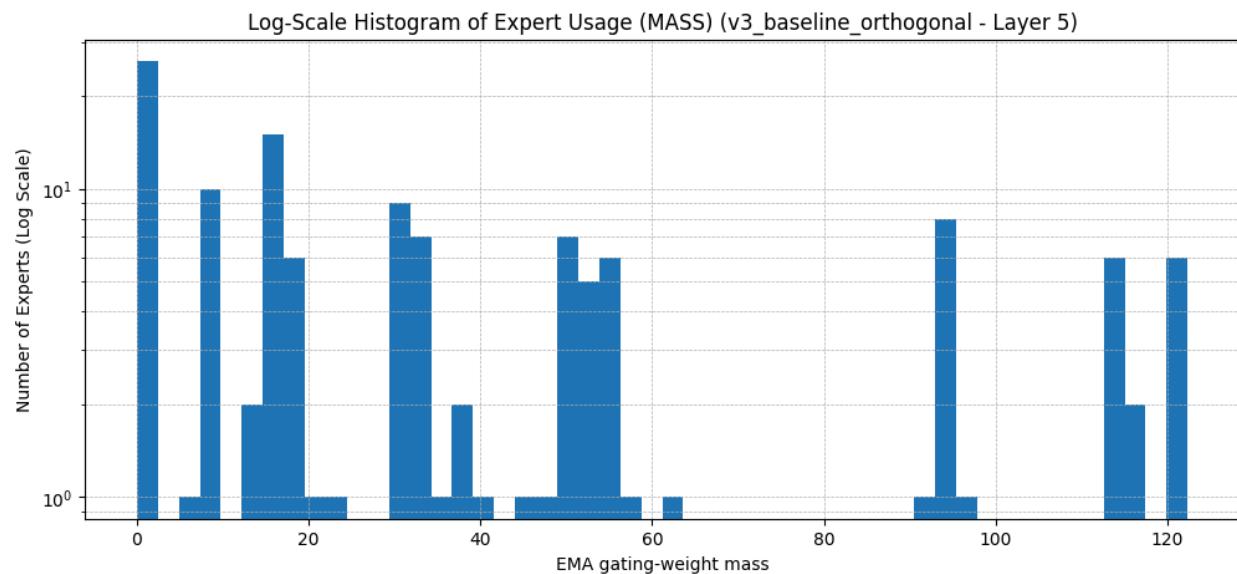
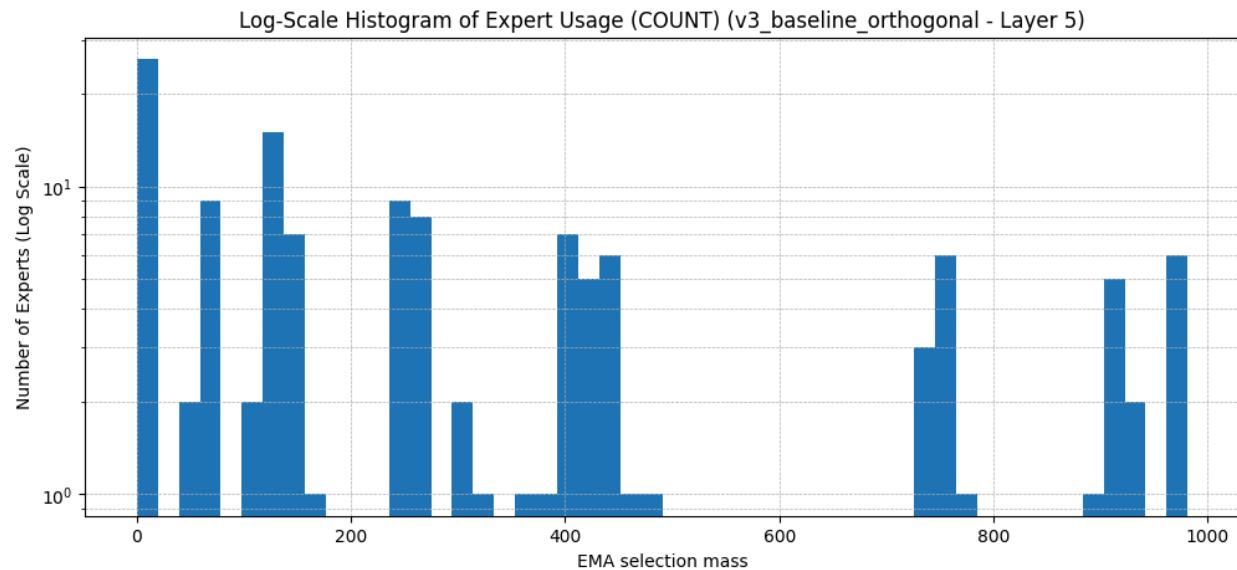
SoME Layer Ablation Flags: {'use\_alpha': True, 'use\_beta': True, 'use\_delta': True}

#### --- Part 2: Aggregate Utilization Analysis (from Middle Layer) ---

Expert Usage (Layer 5): 128/128 (100.00%)

Final Metrics (count) Layer 5: Gini=0.5306, Entropy=6.2774 (Max=7.0000)

Final Metrics (mass) Layer 5: Gini=0.5302, Entropy=6.2786 (Max=7.0000)

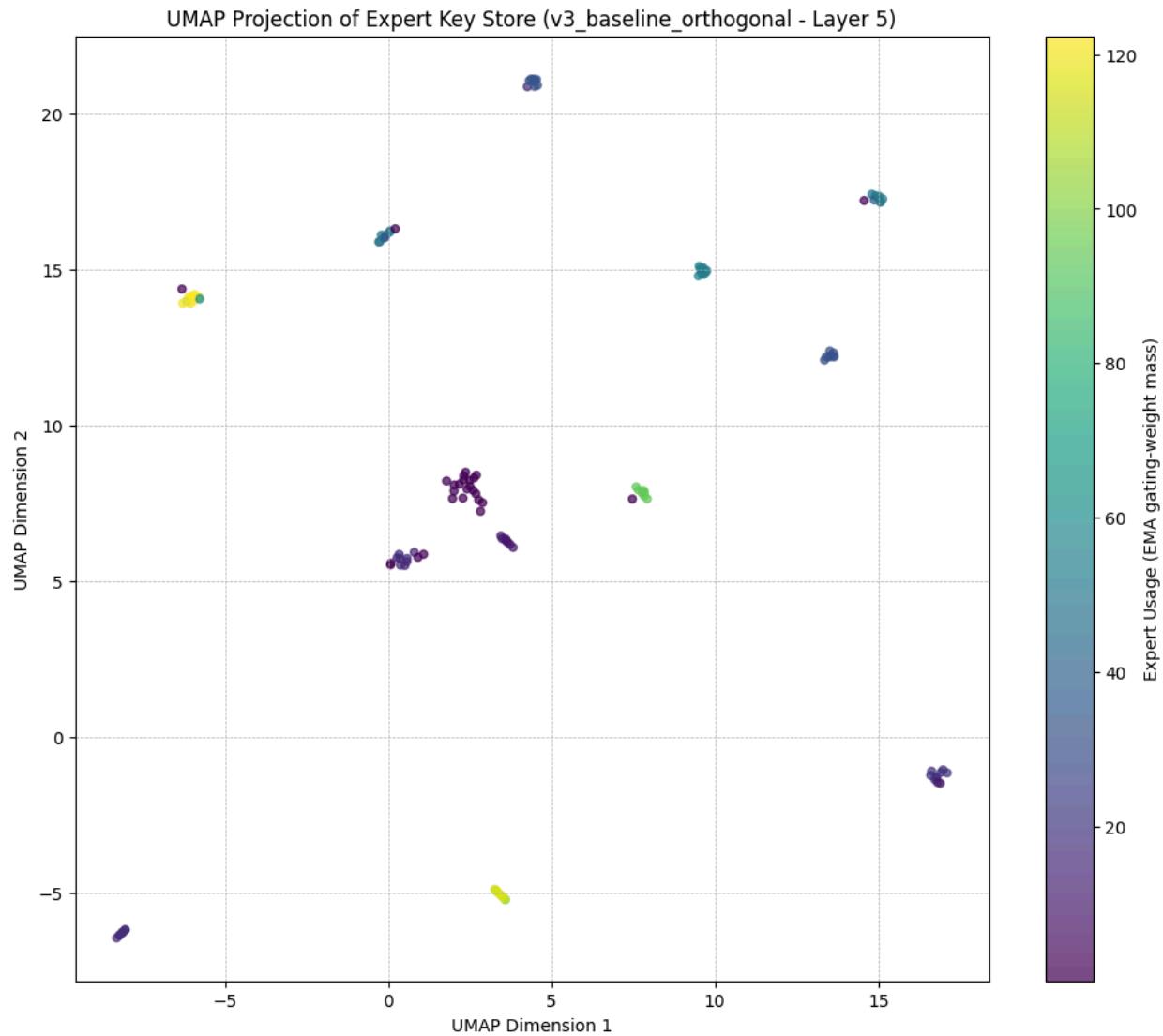


--- Part 3: Key Store Structure Visualization (from Middle Layer) ---

Running UMAP projection on the key store... (this may take a moment)

```
/usr/local/lib/python3.12/dist-packages/umap/umap_.py:1952: UserWarning: n_jobs value 1
 overridden to 1 by setting random_state. Use no seed for parallelism.
```

```
warn(
```



--- Part 4: Multi-Layer Generative Analysis with Expert Tracing ---

--- Prompt ---

Once upon a time, there was a little fox who lived  
`/tmp/ipython-input-310555793.py:121: FutureWarning: `torch.cuda.amp.autocast(args...)` is deprecated. Please use `torch.amp.autocast('cuda', args...)` instead.`  
`with torch.cuda.amp.autocast(enabled=False):`

in a big house. He was very happy and loved to play with his friends. One day, he saw a big, shiny rock in the forest. He was so excited to see what it was. He wanted to see what it was.

--- End of Generation ---

--- Multi-Layer Expert Activation Trace ---

Token 'lived':

Layer 1: Used Experts -> [3, 121, 80, 41, 55, 117, 87, 47]  
Layer 5: Used Experts -> [34, 93, 56, 119, 32, 124, 38, 35]  
Layer 9: Used Experts -> [62, 57, 37, 97, 18, 51, 41, 10]

Token 'in':

Layer 1: Used Experts -> [27, 90, 110, 72, 59, 98, 42, 56]  
Layer 5: Used Experts -> [12, 50, 77, 99, 91, 57, 39, 7]  
Layer 9: Used Experts -> [89, 49, 70, 56, 66, 78, 68, 106]

Token 'a':

Layer 1: Used Experts -> [57, 119, 122, 4, 16, 85, 49, 30]  
Layer 5: Used Experts -> [73, 7, 39, 57, 91, 77, 99, 50]  
Layer 9: Used Experts -> [70, 89, 56, 66, 68, 78, 49, 106]

Token 'big':

Layer 1: Used Experts -> [53, 89, 36, 6, 82, 116, 92, 8]  
Layer 5: Used Experts -> [67, 68, 125, 123, 101, 92, 94, 98]  
Layer 9: Used Experts -> [16, 82, 52, 122, 38, 39, 23, 7]

Token 'house':

Layer 1: Used Experts -> [72, 90, 87, 98, 113, 42, 56, 111]  
Layer 5: Used Experts -> [81, 96, 95, 71, 52, 102, 10, 8]  
Layer 9: Used Experts -> [7, 39, 23, 38, 122, 52, 82, 16]

Token '::':

Layer 1: Used Experts -> [112, 1, 34, 66, 115, 96, 63, 39]  
Layer 5: Used Experts -> [26, 82, 16, 43, 45, 28, 64, 87]  
Layer 9: Used Experts -> [15, 110, 4, 27, 109, 8, 98, 65]

Token 'He':

Layer 1: Used Experts -> [114, 101, 11, 21, 68, 51, 100, 20]  
Layer 5: Used Experts -> [10, 102, 52, 71, 96, 95, 8, 81]  
Layer 9: Used Experts -> [81, 30, 107, 50, 22, 3, 36, 83]

Token 'was':

Layer 1: Used Experts -> [53, 89, 36, 6, 82, 116, 8, 92]  
Layer 5: Used Experts -> [34, 93, 119, 35, 38, 32, 124, 56]  
Layer 9: Used Experts -> [62, 57, 37, 97, 18, 51, 41, 10]

Token 'very':

Layer 1: Used Experts -> [91, 39, 63, 96, 115, 66, 34, 1]  
Layer 5: Used Experts -> [31, 42, 3, 61, 20, 37, 104, 48]  
Layer 9: Used Experts -> [106, 78, 49, 68, 66, 56, 70, 61]

Token 'happy':

- Layer 1: Used Experts -> [48, 5, 83, 69, 126, 28, 78, 65]
- Layer 5: Used Experts -> [67, 125, 123, 94, 92, 101, 68, 98]
- Layer 9: Used Experts -> [9, 121, 87, 127, 112, 111, 104, 53]

Token 'and':

- Layer 1: Used Experts -> [41, 47, 3, 121, 55, 80, 117, 87]
- Layer 5: Used Experts -> [68, 101, 98, 92, 123, 125, 94, 67]
- Layer 9: Used Experts -> [98, 15, 110, 27, 65, 4, 109, 8]

Token 'loved':

- Layer 1: Used Experts -> [109, 64, 102, 45, 70, 97, 93, 94]
- Layer 5: Used Experts -> [106, 70, 34, 24, 55, 1, 46, 72]
- Layer 9: Used Experts -> [99, 49, 78, 68, 106, 66, 56, 70]

Token 'to':

- Layer 1: Used Experts -> [1, 34, 66, 115, 96, 63, 39, 91]
- Layer 5: Used Experts -> [73, 82, 26, 7, 39, 91, 57, 99]
- Layer 9: Used Experts -> [49, 78, 68, 106, 66, 56, 70, 89]

Token 'play':

- Layer 1: Used Experts -> [52, 24, 107, 22, 38, 124, 7, 104]
- Layer 5: Used Experts -> [19, 9, 40, 97, 116, 79, 25, 118]
- Layer 9: Used Experts -> [79, 100, 0, 77, 42, 11, 120, 118]

Token 'with':

- Layer 1: Used Experts -> [29, 71, 125, 44, 14, 43, 23, 120]
- Layer 5: Used Experts -> [67, 94, 125, 123, 92, 98, 101, 68]
- Layer 9: Used Experts -> [59, 93, 67, 91, 26, 119, 89, 5]

Token 'his':

- Layer 1: Used Experts -> [49, 85, 16, 4, 122, 119, 30, 57]
- Layer 5: Used Experts -> [67, 94, 125, 123, 92, 98, 101, 68]
- Layer 9: Used Experts -> [61, 106, 78, 68, 49, 66, 56, 70]

Token 'friends':

- Layer 1: Used Experts -> [120, 14, 71, 125, 43, 44, 23, 29]
- Layer 5: Used Experts -> [67, 94, 125, 123, 92, 98, 101, 68]
- Layer 9: Used Experts -> [16, 82, 52, 122, 38, 23, 7, 39]

Token ':':

- Layer 1: Used Experts -> [78, 65, 83, 5, 126, 28, 69, 48]
- Layer 5: Used Experts -> [108, 98, 94, 92, 123, 125, 101, 68]
- Layer 9: Used Experts -> [65, 27, 110, 15, 4, 109, 8, 86]

Token 'One':

- Layer 1: Used Experts -> [114, 101, 11, 21, 68, 51, 100, 20]
- Layer 5: Used Experts -> [10, 102, 52, 71, 96, 95, 8, 81]
- Layer 9: Used Experts -> [83, 36, 3, 22, 50, 107, 30, 81]

Token 'day':

- Layer 1: Used Experts -> [53, 89, 36, 6, 82, 116, 92, 8]
- Layer 5: Used Experts -> [37, 42, 61, 20, 3, 48, 104, 31]
- Layer 9: Used Experts -> [16, 7, 38, 23, 52, 39, 82, 122]

Token ',':

- Layer 1: Used Experts -> [23, 120, 43, 44, 14, 125, 71, 29]
- Layer 5: Used Experts -> [68, 101, 67, 98, 92, 125, 123, 94]
- Layer 9: Used Experts -> [59, 67, 91, 93, 26, 119, 5, 58]

Token 'he':

- Layer 1: Used Experts -> [17, 92, 8, 116, 82, 6, 36, 89]
- Layer 5: Used Experts -> [25, 116, 97, 40, 9, 79, 19, 118]
- Layer 9: Used Experts -> [106, 66, 56, 68, 70, 78, 49, 89]

Token 'saw':

- Layer 1: Used Experts -> [29, 71, 125, 44, 14, 43, 23, 120]
- Layer 5: Used Experts -> [34, 93, 119, 35, 38, 124, 32, 56]
- Layer 9: Used Experts -> [62, 57, 37, 97, 18, 51, 41, 10]

Token 'a':

- Layer 1: Used Experts -> [19, 25, 0, 12, 73, 108, 46, 33]
- Layer 5: Used Experts -> [99, 50, 91, 77, 57, 39, 7, 73]
- Layer 9: Used Experts -> [106, 78, 68, 49, 66, 56, 70, 89]

Token 'big':

- Layer 1: Used Experts -> [53, 92, 89, 8, 36, 116, 6, 82]
- Layer 5: Used Experts -> [67, 68, 101, 125, 92, 123, 98, 94]
- Layer 9: Used Experts -> [16, 82, 52, 38, 7, 122, 23, 39]

Token ',':

- Layer 1: Used Experts -> [87, 117, 80, 121, 55, 3, 47, 41]
- Layer 5: Used Experts -> [67, 68, 101, 125, 92, 98, 123, 94]
- Layer 9: Used Experts -> [7, 23, 39, 38, 52, 122, 82, 16]

Token 'shiny':

- Layer 1: Used Experts -> [17, 92, 8, 116, 82, 6, 36, 89]
- Layer 5: Used Experts -> [25, 116, 9, 40, 97, 79, 19, 118]

Layer 9: Used Experts -> [62, 57, 37, 97, 18, 51, 41, 10]

Token 'rock':

Layer 1: Used Experts -> [109, 70, 64, 102, 45, 93, 94, 97]  
Layer 5: Used Experts -> [94, 123, 92, 125, 98, 101, 68, 67]  
Layer 9: Used Experts -> [62, 7, 57, 23, 37, 39, 38, 97]

Token 'in':

Layer 1: Used Experts -> [83, 5, 48, 69, 126, 28, 78, 65]  
Layer 5: Used Experts -> [65, 6, 100, 107, 63, 27, 51, 69]  
Layer 9: Used Experts -> [10, 86, 8, 4, 15, 41, 109, 110]

Token 'the':

Layer 1: Used Experts -> [57, 119, 122, 4, 16, 85, 49, 30]  
Layer 5: Used Experts -> [7, 99, 91, 39, 57, 50, 77, 73]  
Layer 9: Used Experts -> [89, 70, 56, 66, 68, 49, 78, 106]

Token 'forest':

Layer 1: Used Experts -> [12, 46, 33, 73, 108, 19, 0, 25]  
Layer 5: Used Experts -> [10, 102, 81, 52, 71, 96, 95, 8]  
Layer 9: Used Experts -> [17, 25, 1, 43, 103, 75, 116, 124]

Token ':':

Layer 1: Used Experts -> [112, 83, 5, 48, 126, 69, 78, 28]  
Layer 5: Used Experts -> [51, 100, 107, 27, 63, 69, 6, 65]  
Layer 9: Used Experts -> [86, 15, 8, 4, 109, 110, 27, 65]

Token 'He':

Layer 1: Used Experts -> [114, 11, 68, 101, 21, 51, 20, 100]  
Layer 5: Used Experts -> [10, 102, 52, 8, 71, 96, 95, 81]  
Layer 9: Used Experts -> [83, 36, 3, 22, 50, 107, 30, 81]

Token 'was':

Layer 1: Used Experts -> [53, 89, 36, 6, 82, 116, 8, 92]  
Layer 5: Used Experts -> [34, 93, 119, 35, 38, 124, 32, 56]  
Layer 9: Used Experts -> [62, 57, 37, 97, 18, 51, 41, 10]

Token 'so':

Layer 1: Used Experts -> [91, 39, 63, 96, 115, 66, 34, 1]  
Layer 5: Used Experts -> [31, 104, 3, 61, 42, 20, 48, 37]  
Layer 9: Used Experts -> [89, 70, 49, 56, 66, 68, 78, 106]

Token 'excited':

Layer 1: Used Experts -> [48, 65, 126, 69, 28, 5, 78, 83]

Layer 5: Used Experts -> [67, 125, 94, 123, 92, 98, 101, 68]  
Layer 9: Used Experts -> [99, 49, 78, 68, 106, 66, 56, 70]

Token 'to':

Layer 1: Used Experts -> [112, 76, 113, 111, 59, 56, 42, 98]  
Layer 5: Used Experts -> [51, 100, 107, 69, 63, 27, 6, 12]  
Layer 9: Used Experts -> [119, 91, 67, 26, 93, 5, 59, 58]

Token 'see':

Layer 1: Used Experts -> [52, 24, 107, 22, 124, 38, 7, 104]  
Layer 5: Used Experts -> [86, 19, 9, 40, 97, 116, 79, 25]  
Layer 9: Used Experts -> [79, 0, 42, 100, 77, 11, 120, 118]

Token 'what':

Layer 1: Used Experts -> [62, 88, 119, 122, 85, 16, 4, 49]  
Layer 5: Used Experts -> [12, 6, 69, 63, 27, 107, 100, 51]  
Layer 9: Used Experts -> [61, 106, 78, 68, 49, 66, 56, 70]

Token 'it':

Layer 1: Used Experts -> [65, 28, 69, 5, 48, 126, 83, 78]  
Layer 5: Used Experts -> [108, 118, 19, 9, 79, 40, 97, 116]  
Layer 9: Used Experts -> [89, 70, 56, 66, 49, 68, 78, 106]

Token 'was':

Layer 1: Used Experts -> [78, 65, 83, 5, 28, 69, 126, 48]  
Layer 5: Used Experts -> [81, 96, 95, 71, 52, 102, 10, 8]  
Layer 9: Used Experts -> [41, 10, 18, 62, 97, 51, 57, 37]

Token '::':

Layer 1: Used Experts -> [91, 39, 63, 96, 115, 66, 34, 1]  
Layer 5: Used Experts -> [31, 104, 3, 61, 42, 20, 48, 37]  
Layer 9: Used Experts -> [93, 59, 67, 119, 91, 26, 5, 58]

Token 'He':

Layer 1: Used Experts -> [20, 100, 51, 68, 11, 21, 101, 114]  
Layer 5: Used Experts -> [10, 102, 52, 71, 96, 8, 95, 81]  
Layer 9: Used Experts -> [83, 36, 3, 22, 50, 107, 30, 81]

Token 'wanted':

Layer 1: Used Experts -> [53, 89, 36, 6, 82, 116, 8, 92]  
Layer 5: Used Experts -> [34, 93, 119, 35, 38, 124, 32, 56]  
Layer 9: Used Experts -> [62, 57, 37, 97, 18, 51, 41, 10]

Token 'to':

Layer 1: Used Experts -> [23, 120, 43, 44, 14, 125, 71, 29]  
Layer 5: Used Experts -> [73, 7, 39, 57, 91, 77, 99, 50]  
Layer 9: Used Experts -> [49, 56, 70, 66, 68, 78, 106, 89]

Token 'see':

Layer 1: Used Experts -> [52, 24, 107, 22, 124, 38, 7, 104]  
Layer 5: Used Experts -> [19, 9, 40, 97, 116, 79, 25, 118]  
Layer 9: Used Experts -> [42, 0, 79, 100, 77, 120, 118, 11]

Token 'what':

Layer 1: Used Experts -> [62, 88, 119, 122, 85, 16, 4, 49]  
Layer 5: Used Experts -> [12, 6, 69, 63, 27, 107, 100, 51]  
Layer 9: Used Experts -> [61, 118, 120, 11, 77, 42, 100, 0]

Token 'it':

Layer 1: Used Experts -> [65, 28, 69, 5, 48, 126, 83, 78]  
Layer 5: Used Experts -> [108, 19, 118, 9, 79, 40, 97, 116]  
Layer 9: Used Experts -> [89, 70, 56, 66, 49, 68, 78, 106]

Token 'was':

Layer 1: Used Experts -> [65, 78, 83, 5, 28, 69, 126, 48]  
Layer 5: Used Experts -> [81, 95, 96, 71, 52, 102, 8, 10]  
Layer 9: Used Experts -> [10, 41, 51, 18, 97, 37, 57, 62]

Token ':':

Layer 1: Used Experts -> [91, 39, 63, 96, 115, 66, 34, 1]  
Layer 5: Used Experts -> [31, 104, 3, 61, 42, 20, 48, 37]  
Layer 9: Used Experts -> [93, 59, 67, 119, 91, 26, 5, 65]

--- Prompt ---

The recipe for the perfect cake is to  
first the other children to look. He was very excited to see the big and he was very excited. He wanted to see  
what it was. He asked the other children, "What are you doing?" The children replied, "I'm going to

--- End of Generation ---

--- Multi-Layer Expert Activation Trace ---

Token 'the':

Layer 1: Used Experts -> [87, 117, 80, 121, 3, 55, 47, 41]  
Layer 5: Used Experts -> [12, 65, 6, 63, 69, 27, 107, 100]  
Layer 9: Used Experts -> [89, 70, 56, 66, 49, 68, 78, 106]

Token 'other':

Layer 1: Used Experts -> [12, 46, 33, 73, 108, 19, 0, 25]

Layer 5: Used Experts -> [10, 102, 52, 71, 96, 81, 95, 8]  
Layer 9: Used Experts -> [124, 116, 75, 103, 43, 25, 1, 17]

Token 'children':

Layer 1: Used Experts -> [99, 10, 67, 13, 40, 50, 74, 9]  
Layer 5: Used Experts -> [31, 104, 3, 61, 20, 42, 48, 37]  
Layer 9: Used Experts -> [15, 98, 110, 4, 8, 109, 27, 86]

Token 'to':

Layer 1: Used Experts -> [87, 117, 80, 121, 55, 3, 47, 41]  
Layer 5: Used Experts -> [16, 45, 28, 64, 43, 87, 82, 26]  
Layer 9: Used Experts -> [86, 8, 109, 4, 27, 110, 65, 15]

Token 'look':

Layer 1: Used Experts -> [52, 24, 107, 22, 124, 7, 38, 104]  
Layer 5: Used Experts -> [19, 118, 9, 79, 97, 40, 116, 25]  
Layer 9: Used Experts -> [61, 118, 120, 11, 42, 77, 0, 100]

Token '::':

Layer 1: Used Experts -> [112, 83, 87, 48, 5, 78, 126, 69]  
Layer 5: Used Experts -> [108, 94, 98, 92, 123, 101, 125, 68]  
Layer 9: Used Experts -> [15, 110, 98, 27, 4, 65, 109, 8]

Token 'He':

Layer 1: Used Experts -> [20, 100, 101, 114, 51, 68, 11, 21]  
Layer 5: Used Experts -> [10, 102, 52, 71, 96, 8, 95, 81]  
Layer 9: Used Experts -> [3, 36, 22, 30, 107, 50, 83, 81]

Token 'was':

Layer 1: Used Experts -> [53, 89, 36, 6, 82, 116, 8, 92]  
Layer 5: Used Experts -> [34, 93, 119, 35, 38, 32, 124, 56]  
Layer 9: Used Experts -> [62, 57, 37, 97, 18, 51, 41, 10]

Token 'very':

Layer 1: Used Experts -> [91, 39, 63, 96, 115, 66, 34, 1]  
Layer 5: Used Experts -> [37, 42, 31, 61, 20, 3, 48, 104]  
Layer 9: Used Experts -> [89, 49, 70, 56, 66, 78, 68, 99]

Token 'excited':

Layer 1: Used Experts -> [48, 5, 83, 126, 69, 28, 78, 65]  
Layer 5: Used Experts -> [67, 68, 125, 101, 123, 92, 94, 98]  
Layer 9: Used Experts -> [99, 9, 121, 87, 127, 112, 111, 104]

Token 'to':

Layer 1: Used Experts -> [112, 76, 113, 111, 59, 56, 42, 98]  
Layer 5: Used Experts -> [69, 51, 100, 27, 107, 63, 6, 12]  
Layer 9: Used Experts -> [65, 98, 27, 93, 110, 15, 4, 109]

Token 'see':

Layer 1: Used Experts -> [52, 24, 107, 22, 124, 38, 7, 104]  
Layer 5: Used Experts -> [25, 19, 9, 116, 40, 97, 79, 118]  
Layer 9: Used Experts -> [79, 42, 0, 100, 77, 11, 120, 118]

Token 'the':

Layer 1: Used Experts -> [62, 88, 119, 122, 85, 16, 4, 49]  
Layer 5: Used Experts -> [99, 91, 7, 39, 57, 12, 50, 77]  
Layer 9: Used Experts -> [89, 70, 56, 66, 68, 49, 78, 106]

Token 'big':

Layer 1: Used Experts -> [12, 46, 33, 19, 73, 108, 0, 25]  
Layer 5: Used Experts -> [10, 102, 52, 71, 96, 81, 95, 8]  
Layer 9: Used Experts -> [124, 116, 103, 75, 43, 25, 1, 17]

Token 'and':

Layer 1: Used Experts -> [87, 117, 80, 121, 55, 3, 47, 72]  
Layer 5: Used Experts -> [68, 67, 101, 98, 92, 125, 123, 94]  
Layer 9: Used Experts -> [10, 41, 51, 18, 97, 62, 57, 37]

Token 'he':

Layer 1: Used Experts -> [97, 64, 102, 45, 94, 109, 70, 93]  
Layer 5: Used Experts -> [106, 70, 24, 46, 55, 1, 72, 5]  
Layer 9: Used Experts -> [89, 49, 70, 56, 66, 78, 68, 106]

Token 'was':

Layer 1: Used Experts -> [29, 71, 125, 44, 14, 43, 120, 23]  
Layer 5: Used Experts -> [34, 93, 119, 35, 124, 38, 32, 56]  
Layer 9: Used Experts -> [62, 57, 37, 97, 18, 51, 41, 10]

Token 'very':

Layer 1: Used Experts -> [91, 39, 63, 96, 115, 66, 34, 1]  
Layer 5: Used Experts -> [37, 31, 42, 61, 3, 20, 48, 104]  
Layer 9: Used Experts -> [86, 8, 10, 109, 41, 65, 51, 18]

Token 'excited':

Layer 1: Used Experts -> [48, 5, 126, 69, 83, 28, 78, 65]  
Layer 5: Used Experts -> [34, 67, 93, 119, 38, 35, 32, 56]  
Layer 9: Used Experts -> [99, 62, 57, 37, 97, 18, 51, 41]

Token ':':

- Layer 1: Used Experts -> [112, 76, 113, 111, 56, 59, 42, 98]
- Layer 5: Used Experts -> [51, 100, 69, 6, 63, 107, 27, 12]
- Layer 9: Used Experts -> [98, 65, 27, 110, 15, 4, 109, 93]

Token 'He':

- Layer 1: Used Experts -> [20, 100, 51, 68, 21, 11, 101, 114]
- Layer 5: Used Experts -> [10, 102, 52, 71, 96, 95, 8, 81]
- Layer 9: Used Experts -> [83, 36, 3, 22, 50, 107, 30, 81]

Token 'wanted':

- Layer 1: Used Experts -> [53, 89, 36, 6, 82, 116, 8, 92]
- Layer 5: Used Experts -> [34, 93, 119, 35, 38, 32, 124, 56]
- Layer 9: Used Experts -> [62, 57, 37, 97, 18, 51, 41, 10]

Token 'to':

- Layer 1: Used Experts -> [120, 23, 43, 14, 44, 125, 71, 29]
- Layer 5: Used Experts -> [73, 7, 39, 57, 77, 91, 50, 99]
- Layer 9: Used Experts -> [89, 70, 56, 66, 49, 68, 78, 106]

Token 'see':

- Layer 1: Used Experts -> [52, 24, 38, 107, 22, 124, 7, 104]
- Layer 5: Used Experts -> [19, 9, 40, 97, 79, 116, 118, 25]
- Layer 9: Used Experts -> [42, 0, 79, 100, 77, 120, 118, 11]

Token 'what':

- Layer 1: Used Experts -> [62, 88, 119, 122, 85, 16, 4, 49]
- Layer 5: Used Experts -> [12, 99, 91, 50, 57, 39, 7, 77]
- Layer 9: Used Experts -> [61, 106, 78, 68, 49, 66, 56, 70]

Token 'it':

- Layer 1: Used Experts -> [65, 28, 69, 5, 126, 48, 78, 83]
- Layer 5: Used Experts -> [108, 118, 19, 9, 79, 97, 40, 116]
- Layer 9: Used Experts -> [89, 70, 56, 49, 66, 68, 78, 106]

Token 'was':

- Layer 1: Used Experts -> [65, 78, 28, 69, 126, 5, 83, 48]
- Layer 5: Used Experts -> [81, 10, 52, 71, 102, 96, 95, 8]
- Layer 9: Used Experts -> [10, 41, 51, 18, 97, 37, 57, 62]

Token '::':

- Layer 1: Used Experts -> [91, 39, 63, 96, 115, 66, 34, 1]
- Layer 5: Used Experts -> [31, 42, 61, 3, 20, 37, 104, 48]
- Layer 9: Used Experts -> [93, 65, 59, 27, 109, 86, 8, 67]

Token 'He':

- Layer 1: Used Experts -> [20, 100, 51, 68, 21, 11, 101, 114]
- Layer 5: Used Experts -> [10, 102, 52, 71, 96, 95, 8, 81]
- Layer 9: Used Experts -> [83, 36, 3, 22, 50, 107, 30, 81]

Token 'asked':

- Layer 1: Used Experts -> [53, 89, 36, 6, 82, 116, 8, 92]
- Layer 5: Used Experts -> [34, 93, 119, 35, 38, 124, 32, 56]
- Layer 9: Used Experts -> [62, 57, 37, 97, 18, 51, 41, 10]

Token 'the':

- Layer 1: Used Experts -> [30, 57, 49, 4, 16, 85, 122, 119]
- Layer 5: Used Experts -> [87, 64, 43, 28, 45, 16, 82, 26]
- Layer 9: Used Experts -> [89, 70, 56, 66, 68, 78, 106, 49]

Token 'other':

- Layer 1: Used Experts -> [46, 12, 33, 73, 108, 19, 0, 25]
- Layer 5: Used Experts -> [10, 102, 52, 71, 81, 96, 95, 8]
- Layer 9: Used Experts -> [124, 1, 116, 43, 75, 25, 17, 103]

Token 'children':

- Layer 1: Used Experts -> [99, 13, 10, 67, 40, 50, 9, 74]
- Layer 5: Used Experts -> [67, 94, 125, 123, 92, 101, 98, 68]
- Layer 9: Used Experts -> [98, 15, 110, 4, 27, 8, 109, 86]

Token ':':

- Layer 1: Used Experts -> [23, 120, 87, 43, 44, 14, 125, 71]
- Layer 5: Used Experts -> [12, 6, 65, 63, 27, 69, 107, 100]
- Layer 9: Used Experts -> [93, 65, 27, 110, 109, 59, 15, 4]

Token """:

- Layer 1: Used Experts -> [17, 92, 8, 116, 82, 6, 36, 89]
- Layer 5: Used Experts -> [25, 116, 97, 40, 79, 9, 118, 19]
- Layer 9: Used Experts -> [86, 8, 109, 4, 27, 65, 110, 15]

Token 'What':

- Layer 1: Used Experts -> [9, 74, 50, 40, 67, 10, 13, 99]
- Layer 5: Used Experts -> [54, 15, 59, 76, 60, 120, 78, 86]
- Layer 9: Used Experts -> [3, 36, 22, 50, 107, 30, 83, 81]

Token 'are':

- Layer 1: Used Experts -> [2, 127, 60, 106, 118, 105, 84, 103]
- Layer 5: Used Experts -> [25, 118, 116, 79, 97, 40, 9, 19]

Layer 9: Used Experts -> [20, 58, 60, 117, 105, 102, 5, 47]

Token 'you':

Layer 1: Used Experts -> [48, 126, 69, 28, 5, 83, 78, 65]

Layer 5: Used Experts -> [3, 61, 20, 42, 31, 37, 48, 104]

Layer 9: Used Experts -> [61, 106, 68, 66, 78, 56, 70, 49]

Token 'doing':

Layer 1: Used Experts -> [63, 66, 115, 96, 39, 34, 1, 91]

Layer 5: Used Experts -> [25, 9, 19, 40, 116, 97, 79, 118]

Layer 9: Used Experts -> [79, 100, 0, 77, 11, 42, 120, 118]

Token '?":

Layer 1: Used Experts -> [83, 5, 28, 69, 48, 126, 78, 65]

Layer 5: Used Experts -> [50, 77, 99, 91, 57, 39, 7, 73]

Layer 9: Used Experts -> [20, 58, 60, 105, 92, 47, 5, 34]

Token 'The':

Layer 1: Used Experts -> [83, 78, 5, 126, 69, 48, 28, 65]

Layer 5: Used Experts -> [25, 9, 116, 19, 40, 97, 79, 118]

Layer 9: Used Experts -> [89, 70, 56, 66, 68, 5, 106, 26]

Token 'children':

Layer 1: Used Experts -> [91, 39, 63, 96, 115, 66, 34, 1]

Layer 5: Used Experts -> [81, 95, 96, 71, 52, 102, 10, 8]

Layer 9: Used Experts -> [1, 116, 43, 25, 75, 17, 103, 124]

Token 'replied':

Layer 1: Used Experts -> [87, 117, 80, 121, 55, 3, 47, 41]

Layer 5: Used Experts -> [6, 65, 63, 27, 107, 100, 69, 51]

Layer 9: Used Experts -> [86, 8, 109, 4, 10, 15, 110, 41]

Token ',':

Layer 1: Used Experts -> [99, 10, 67, 40, 50, 13, 74, 9]

Layer 5: Used Experts -> [94, 125, 123, 92, 98, 101, 67, 68]

Layer 9: Used Experts -> [58, 5, 26, 91, 119, 67, 59, 20]

Token "":

Layer 1: Used Experts -> [17, 92, 8, 116, 82, 6, 36, 89]

Layer 5: Used Experts -> [25, 116, 97, 40, 79, 9, 118, 19]

Layer 9: Used Experts -> [65, 93, 27, 109, 86, 8, 4, 110]

Token 'I':

Layer 1: Used Experts -> [9, 74, 50, 40, 67, 10, 13, 99]

Layer 5: Used Experts -> [54, 15, 59, 76, 60, 120, 78, 86]  
Layer 9: Used Experts -> [3, 36, 22, 30, 107, 50, 81, 83]

Token "":

Layer 1: Used Experts -> [30, 57, 103, 84, 105, 118, 106, 60]  
Layer 5: Used Experts -> [53, 17, 80, 111, 127, 49, 30, 11]  
Layer 9: Used Experts -> [79, 81, 30, 107, 3, 50, 22, 36]

Token 'm':

Layer 1: Used Experts -> [1, 34, 66, 115, 63, 96, 39, 91]  
Layer 5: Used Experts -> [117, 4, 84, 2, 122, 44, 23, 74]  
Layer 9: Used Experts -> [98, 102, 92, 105, 60, 47, 34, 20]

Token 'going':

Layer 1: Used Experts -> [103, 84, 105, 118, 106, 60, 127, 2]  
Layer 5: Used Experts -> [48, 37, 104, 42, 61, 20, 3, 31]  
Layer 9: Used Experts -> [61, 106, 78, 118, 49, 68, 42, 120]

Token 'to':

Layer 1: Used Experts -> [91, 39, 63, 96, 115, 66, 34, 1]  
Layer 5: Used Experts -> [31, 104, 48, 3, 61, 20, 42, 37]  
Layer 9: Used Experts -> [65, 27, 109, 110, 4, 8, 15, 86]

--- Prompt ---

The robot opened its eyes and  
saw a little girl. She wanted to go to the park. She asked her mom, "What is the little girl?" Her mom said, "It's a  
big, little girl. It's very pretty." The little girl was excited

--- End of Generation ---

--- Multi-Layer Expert Activation Trace ---

Token 'a':

Layer 1: Used Experts -> [108, 73, 33, 46, 12, 19, 25, 0]  
Layer 5: Used Experts -> [37, 42, 104, 61, 20, 3, 48, 31]  
Layer 9: Used Experts -> [98, 15, 109, 4, 8, 110, 27, 86]

Token 'little':

Layer 1: Used Experts -> [53, 89, 36, 6, 82, 116, 8, 92]  
Layer 5: Used Experts -> [67, 68, 101, 125, 92, 98, 123, 94]  
Layer 9: Used Experts -> [7, 23, 38, 39, 52, 16, 82, 122]

Token 'girl':

Layer 1: Used Experts -> [30, 57, 49, 4, 16, 85, 122, 119]  
Layer 5: Used Experts -> [8, 52, 71, 102, 95, 96, 10, 81]

Layer 9: Used Experts -> [62, 10, 57, 41, 18, 37, 97, 51]

Token ':':

Layer 1: Used Experts -> [76, 59, 98, 56, 42, 90, 111, 113]

Layer 5: Used Experts -> [65, 6, 63, 27, 107, 100, 69, 51]

Layer 9: Used Experts -> [10, 41, 51, 18, 97, 37, 57, 62]

Token 'She':

Layer 1: Used Experts -> [114, 101, 11, 21, 68, 51, 100, 20]

Layer 5: Used Experts -> [10, 102, 52, 71, 96, 95, 81, 8]

Layer 9: Used Experts -> [81, 30, 107, 50, 22, 83, 3, 36]

Token 'wanted':

Layer 1: Used Experts -> [44, 71, 125, 14, 43, 29, 23, 120]

Layer 5: Used Experts -> [34, 93, 119, 35, 38, 124, 32, 56]

Layer 9: Used Experts -> [62, 57, 37, 97, 18, 51, 41, 10]

Token 'to':

Layer 1: Used Experts -> [23, 120, 43, 44, 14, 125, 71, 29]

Layer 5: Used Experts -> [73, 7, 39, 57, 77, 91, 50, 99]

Layer 9: Used Experts -> [49, 78, 106, 68, 66, 56, 70, 89]

Token 'go':

Layer 1: Used Experts -> [52, 24, 38, 107, 22, 124, 7, 104]

Layer 5: Used Experts -> [19, 9, 25, 40, 116, 97, 79, 118]

Layer 9: Used Experts -> [79, 0, 100, 42, 77, 11, 120, 118]

Token 'to':

Layer 1: Used Experts -> [91, 39, 63, 96, 115, 66, 34, 1]

Layer 5: Used Experts -> [31, 104, 3, 61, 20, 42, 48, 37]

Layer 9: Used Experts -> [93, 65, 27, 110, 109, 59, 4, 8]

Token 'the':

Layer 1: Used Experts -> [52, 24, 38, 107, 22, 124, 7, 104]

Layer 5: Used Experts -> [19, 9, 25, 40, 97, 116, 79, 118]

Layer 9: Used Experts -> [42, 0, 118, 100, 77, 120, 11, 79]

Token 'park':

Layer 1: Used Experts -> [46, 33, 73, 12, 108, 19, 0, 25]

Layer 5: Used Experts -> [10, 102, 52, 71, 96, 81, 95, 8]

Layer 9: Used Experts -> [124, 1, 116, 43, 75, 25, 17, 103]

Token ':':

Layer 1: Used Experts -> [91, 29, 71, 125, 14, 44, 43, 120]

Layer 5: Used Experts -> [65, 6, 63, 27, 107, 100, 69, 51]  
Layer 9: Used Experts -> [93, 119, 98, 91, 67, 26, 5, 59]

Token 'She':

Layer 1: Used Experts -> [20, 100, 51, 101, 68, 21, 11, 114]  
Layer 5: Used Experts -> [10, 102, 8, 52, 71, 96, 95, 81]  
Layer 9: Used Experts -> [81, 30, 107, 50, 22, 3, 83, 36]

Token 'asked':

Layer 1: Used Experts -> [29, 71, 125, 44, 14, 43, 23, 120]  
Layer 5: Used Experts -> [34, 93, 119, 35, 38, 124, 32, 56]  
Layer 9: Used Experts -> [62, 57, 37, 97, 18, 51, 41, 10]

Token 'her':

Layer 1: Used Experts -> [30, 57, 49, 4, 16, 85, 122, 119]  
Layer 5: Used Experts -> [105, 33, 87, 64, 28, 45, 43, 16]  
Layer 9: Used Experts -> [61, 70, 106, 56, 66, 68, 78, 49]

Token 'mom':

Layer 1: Used Experts -> [72, 90, 98, 42, 59, 56, 111, 113]  
Layer 5: Used Experts -> [67, 94, 125, 123, 92, 98, 101, 68]  
Layer 9: Used Experts -> [16, 82, 52, 38, 122, 7, 23, 39]

Token ':':

Layer 1: Used Experts -> [112, 76, 113, 111, 56, 59, 42, 98]  
Layer 5: Used Experts -> [34, 93, 119, 35, 38, 32, 124, 56]  
Layer 9: Used Experts -> [58, 5, 119, 26, 91, 67, 59, 20]

Token """:

Layer 1: Used Experts -> [17, 92, 8, 116, 82, 6, 36, 89]  
Layer 5: Used Experts -> [25, 116, 9, 40, 97, 79, 19, 118]  
Layer 9: Used Experts -> [59, 93, 67, 91, 119, 26, 5, 65]

Token 'What':

Layer 1: Used Experts -> [9, 74, 50, 40, 67, 10, 99, 13]  
Layer 5: Used Experts -> [54, 15, 59, 76, 60, 120, 78, 86]  
Layer 9: Used Experts -> [81, 30, 107, 50, 22, 3, 36, 83]

Token 'is':

Layer 1: Used Experts -> [2, 127, 60, 106, 118, 105, 84, 103]  
Layer 5: Used Experts -> [19, 9, 40, 97, 79, 116, 118, 25]  
Layer 9: Used Experts -> [48, 117, 102, 34, 47, 92, 105, 60]

Token 'the':

Layer 1: Used Experts -> [65, 78, 28, 69, 5, 126, 83, 48]  
Layer 5: Used Experts -> [37, 42, 61, 20, 3, 48, 104, 31]  
Layer 9: Used Experts -> [61, 106, 78, 68, 49, 66, 56, 70]

Token 'little':

Layer 1: Used Experts -> [108, 33, 73, 46, 12, 19, 25, 0]  
Layer 5: Used Experts -> [10, 102, 81, 52, 71, 96, 95, 8]  
Layer 9: Used Experts -> [39, 122, 23, 52, 82, 38, 7, 16]

Token 'girl':

Layer 1: Used Experts -> [30, 57, 49, 4, 16, 85, 122, 119]  
Layer 5: Used Experts -> [81, 52, 96, 71, 95, 102, 10, 8]  
Layer 9: Used Experts -> [39, 7, 23, 38, 122, 52, 82, 16]

Token '?':

Layer 1: Used Experts -> [76, 59, 56, 111, 42, 98, 113, 90]  
Layer 5: Used Experts -> [106, 70, 24, 55, 72, 1, 46, 5]  
Layer 9: Used Experts -> [60, 105, 47, 34, 92, 102, 117, 20]

Token 'Her':

Layer 1: Used Experts -> [47, 55, 41, 121, 80, 117, 3, 83]  
Layer 5: Used Experts -> [9, 19, 25, 116, 40, 97, 79, 118]  
Layer 9: Used Experts -> [36, 83, 3, 22, 50, 107, 30, 81]

Token 'mom':

Layer 1: Used Experts -> [119, 122, 85, 16, 4, 49, 57, 30]  
Layer 5: Used Experts -> [67, 94, 125, 123, 92, 98, 101, 68]  
Layer 9: Used Experts -> [53, 104, 111, 112, 127, 87, 121, 9]

Token 'said':

Layer 1: Used Experts -> [112, 76, 113, 111, 56, 59, 42, 98]  
Layer 5: Used Experts -> [124, 35, 119, 38, 32, 34, 93, 56]  
Layer 9: Used Experts -> [15, 4, 8, 110, 86, 109, 27, 65]

Token ':':

Layer 1: Used Experts -> [41, 47, 55, 121, 80, 3, 117, 87]  
Layer 5: Used Experts -> [67, 94, 125, 123, 92, 98, 101, 68]  
Layer 9: Used Experts -> [5, 26, 58, 91, 119, 67, 59, 93]

Token '":'

Layer 1: Used Experts -> [17, 92, 8, 116, 82, 6, 36, 89]  
Layer 5: Used Experts -> [25, 116, 97, 40, 9, 79, 19, 118]  
Layer 9: Used Experts -> [86, 8, 109, 4, 27, 110, 65, 15]

Token 'It':

- Layer 1: Used Experts -> [9, 74, 50, 40, 67, 10, 13, 99]
- Layer 5: Used Experts -> [54, 15, 59, 76, 60, 78, 120, 86]
- Layer 9: Used Experts -> [81, 30, 107, 50, 22, 3, 36, 83]

Token "":

- Layer 1: Used Experts -> [120, 23, 43, 44, 14, 125, 71, 29]
- Layer 5: Used Experts -> [93, 56, 32, 119, 124, 38, 35, 34]
- Layer 9: Used Experts -> [62, 57, 48, 37, 97, 18, 51, 41]

Token 's':

- Layer 1: Used Experts -> [1, 34, 66, 115, 96, 63, 39, 91]
- Layer 5: Used Experts -> [4, 117, 84, 122, 44, 74, 23, 2]
- Layer 9: Used Experts -> [15, 110, 4, 98, 27, 8, 109, 86]

Token 'a':

- Layer 1: Used Experts -> [91, 39, 63, 96, 115, 66, 34, 1]
- Layer 5: Used Experts -> [94, 125, 123, 92, 98, 101, 67, 68]
- Layer 9: Used Experts -> [99, 49, 78, 106, 68, 66, 56, 70]

Token 'big':

- Layer 1: Used Experts -> [53, 89, 92, 36, 6, 8, 82, 116]
- Layer 5: Used Experts -> [67, 68, 101, 125, 92, 98, 123, 94]
- Layer 9: Used Experts -> [16, 82, 52, 38, 122, 7, 23, 39]

Token ',':

- Layer 1: Used Experts -> [87, 117, 80, 121, 55, 3, 47, 41]
- Layer 5: Used Experts -> [88, 68, 101, 98, 92, 123, 125, 94]
- Layer 9: Used Experts -> [7, 23, 39, 38, 52, 122, 82, 16]

Token 'little':

- Layer 1: Used Experts -> [17, 92, 8, 116, 82, 6, 36, 89]
- Layer 5: Used Experts -> [25, 116, 97, 40, 9, 79, 19, 118]
- Layer 9: Used Experts -> [104, 53, 111, 127, 112, 87, 121, 9]

Token 'girl':

- Layer 1: Used Experts -> [30, 57, 49, 4, 16, 85, 122, 119]
- Layer 5: Used Experts -> [81, 95, 96, 71, 52, 102, 8, 10]
- Layer 9: Used Experts -> [7, 23, 39, 38, 122, 52, 82, 16]

Token '!!':

- Layer 1: Used Experts -> [76, 59, 56, 42, 111, 98, 113, 90]
- Layer 5: Used Experts -> [70, 106, 24, 55, 72, 1, 5, 46]
- Layer 9: Used Experts -> [102, 92, 34, 47, 105, 60, 48, 117]

Token 'It':

- Layer 1: Used Experts -> [20, 100, 51, 101, 68, 114, 21, 11]
- Layer 5: Used Experts -> [8, 95, 96, 71, 52, 81, 102, 10]
- Layer 9: Used Experts -> [81, 30, 107, 50, 22, 3, 36, 83]

Token "":

- Layer 1: Used Experts -> [120, 23, 43, 44, 14, 125, 71, 29]
- Layer 5: Used Experts -> [93, 56, 32, 38, 119, 124, 35, 34]
- Layer 9: Used Experts -> [62, 57, 37, 97, 18, 51, 41, 10]

Token 's':

- Layer 1: Used Experts -> [1, 34, 66, 115, 96, 63, 39, 91]
- Layer 5: Used Experts -> [4, 117, 84, 122, 74, 44, 23, 2]
- Layer 9: Used Experts -> [15, 86, 4, 8, 110, 109, 27, 65]

Token 'a':

- Layer 1: Used Experts -> [91, 39, 63, 96, 115, 66, 34, 1]
- Layer 5: Used Experts -> [94, 125, 123, 92, 98, 101, 67, 68]
- Layer 9: Used Experts -> [99, 9, 121, 87, 127, 112, 111, 104]

Token 'very':

- Layer 1: Used Experts -> [53, 89, 92, 36, 8, 6, 116, 82]
- Layer 5: Used Experts -> [67, 68, 101, 125, 92, 98, 123, 94]
- Layer 9: Used Experts -> [16, 82, 52, 38, 7, 122, 23, 39]

Token 'pretty':

- Layer 1: Used Experts -> [48, 5, 83, 126, 69, 28, 78, 65]
- Layer 5: Used Experts -> [67, 68, 101, 92, 98, 125, 123, 94]
- Layer 9: Used Experts -> [16, 82, 52, 38, 7, 23, 122, 39]

Token '."':

- Layer 1: Used Experts -> [65, 48, 126, 69, 28, 5, 78, 83]
- Layer 5: Used Experts -> [98, 101, 92, 123, 94, 125, 68, 67]
- Layer 9: Used Experts -> [39, 7, 23, 38, 122, 52, 82, 16]

Token 'The':

- Layer 1: Used Experts -> [2, 127, 60, 106, 118, 105, 84, 103]
- Layer 5: Used Experts -> [8, 95, 81, 96, 71, 52, 102, 10]
- Layer 9: Used Experts -> [81, 30, 107, 50, 22, 3, 36, 83]

Token 'little':

- Layer 1: Used Experts -> [91, 39, 63, 96, 115, 66, 34, 1]
- Layer 5: Used Experts -> [88, 56, 32, 38, 35, 124, 119, 93]

Layer 9: Used Experts -> [122, 82, 52, 39, 23, 38, 16, 7]

Token 'girl':

Layer 1: Used Experts -> [30, 57, 49, 4, 16, 85, 122, 119]

Layer 5: Used Experts -> [81, 95, 96, 71, 52, 8, 102, 10]

Layer 9: Used Experts -> [7, 23, 39, 38, 52, 122, 82, 16]

Token 'was':

Layer 1: Used Experts -> [76, 59, 56, 42, 111, 98, 113, 90]

Layer 5: Used Experts -> [70, 24, 72, 5, 55, 1, 46, 106]

Layer 9: Used Experts -> [62, 57, 97, 18, 37, 41, 51, 10]

Token 'excited':

Layer 1: Used Experts -> [91, 39, 63, 96, 115, 66, 34, 1]

Layer 5: Used Experts -> [31, 104, 48, 61, 42, 3, 20, 37]

Layer 9: Used Experts -> [89, 49, 70, 56, 66, 78, 68, 106]