```
=== GPU Information ===
NVIDIA A100-SXM4-40GB, 40960 MiB, 580.95.05
NVIDIA A100-SXM4-40GB, 40960 MiB, 580.95.05
NVIDIA A100-SXM4-40GB, 40960 MiB, 580.95.05
NVIDIA A100-SXM4-40GB, 40960 MiB, 580.95.05
=== Checking if vision_ccs.py exists ===
-rw-r-----. 1 mdemirev mdemirev 17K Oct 22 02:39 vision_ccs.py
=== Running vision_ccs.py ===
/home/mdemirev/.local/lib/python3.11/site-packages/huggingface_hub/file_download.py:945:
FutureWarning: `resume_download` is deprecated and will be removed in version 1.0.0. Downloads
always resume when possible. If you want to force a new download, use `force_download=True`.
  warnings.warn(
Special tokens have been added in the vocabulary, make sure the associated word embeddings are
fine-tuned or trained.

======================================================================
               VISIONCCS PIPELINE
          LLaVA + CCS (Original Methodology)
======================================================================

Configuration:
  Model: llava-hf/llava-1.5-7b-hf
  Samples per category:
    - object_detection: 1323
    - attribute_recognition: 3410
    - spatial_recognition: 1030
  Batch size: 40
  Cache enabled: False
  Categories: object_detection, attribute_recognition, spatial_recognition

CCS Training:
  Epochs per trial: 1000
  Random restarts: 10
  Learning rate: 0.001
  Weight decay: 0.01

######################################################################
# CATEGORY: OBJECT_DETECTION
######################################################################
LOADING DATA for category: 'object_detection'
Using 1323 samples from 'object_detection'

======================================================================
EXTRACTING HIDDEN STATES: OBJECT_DETECTION
======================================================================
⚠ Cache disabled (use_cache=False). Extracting new...

Processing 1323 samples in batches of 40
Searching in 2 image directories

======================================================================
LOADING LLAVA MODEL: llava-hf/llava-1.5-7b-hf
======================================================================
Device: cuda

Loading checkpoint shards:   0%|          | 0/3 [00:00<?, ?it/s]
Loading checkpoint shards:  33%|███▎      | 1/3 [00:02<00:04,  2.42s/it]
Loading checkpoint shards:  67%|██████▋   | 2/3 [00:04<00:02,  2.33s/it]
Loading checkpoint shards: 100%|██████████| 3/3 [00:06<00:00,  2.16s/it]
Loading checkpoint shards: 100%|██████████| 3/3 [00:06<00:00,  2.21s/it]
✓ Model loaded successfully


Batches:   0%|          | 0/34 [00:00<?, ?it/s]
Batches:   3%|▎         | 1/34 [00:13<07:27, 13.56s/it]
Batches:   6%|▌         | 2/34 [00:26<07:02, 13.20s/it]
Batches:   9%|▉         | 3/34 [00:37<06:21, 12.31s/it]
```

```
Batches:  12%|          | 4/34 [00:49<06:00, 12.02s/it]
Batches:  15%|          | 5/34 [01:00<05:40, 11.72s/it]
Batches:  18%|          | 6/34 [01:13<05:36, 12.00s/it]
Batches:  21%|          | 7/34 [01:25<05:23, 11.98s/it]
Batches:  24%|          | 8/34 [01:35<05:02, 11.62s/it]
Batches:  26%|          | 9/34 [01:47<04:49, 11.59s/it]
Batches:  29%|          | 10/34 [01:59<04:42, 11.79s/it]
Batches:  32%|          | 11/34 [02:11<04:31, 11.82s/it]
Batches:  35%|          | 12/34 [02:23<04:18, 11.75s/it]
Batches:  38%|          | 13/34 [02:32<03:50, 11.00s/it]
Batches:  41%|          | 14/34 [02:44<03:47, 11.36s/it]
Batches:  44%|          | 15/34 [02:55<03:31, 11.12s/it]
Batches:  47%|          | 16/34 [03:07<03:27, 11.53s/it]
Batches:  50%|          | 17/34 [03:18<03:12, 11.33s/it]
Batches:  53%|          | 18/34 [03:30<03:05, 11.62s/it]
Batches:  56%|          | 19/34 [03:44<03:01, 12.13s/it]
Batches:  59%|          | 20/34 [03:55<02:47, 11.97s/it]
Batches:  62%|          | 21/34 [04:07<02:35, 11.95s/it]
Batches:  65%|          | 22/34 [04:18<02:20, 11.71s/it]
Batches:  68%|          | 23/34 [04:30<02:09, 11.75s/it]
Batches:  71%|          | 24/34 [04:43<02:02, 12.21s/it]
Batches:  74%|          | 25/34 [04:56<01:50, 12.23s/it]
Batches:  76%|          | 26/34 [05:07<01:35, 11.96s/it]
Batches:  79%|          | 27/34 [05:20<01:25, 12.16s/it]
Batches:  82%|          | 28/34 [05:30<01:10, 11.69s/it]
Batches:  85%|          | 29/34 [05:42<00:58, 11.74s/it]
Batches:  88%|          | 30/34 [05:53<00:46, 11.58s/it]
Batches:  91%|          | 31/34 [06:05<00:34, 11.57s/it]
Batches:  94%|          | 32/34 [06:15<00:22, 11.28s/it]
Batches:  97%|          | 33/34 [06:27<00:11, 11.27s/it]
Batches: 100%|          | 34/34 [06:28<00:00,  8.22s/it]
Batches: 100%|          | 34/34 [06:28<00:00, 11.42s/it]
/home/mdemirev/.local/lib/python3.11/site-packages/huggingface_hub/file_download.py:945:
FutureWarning: `resume_download` is deprecated and will be removed in version 1.0.0. Downloads
always resume when possible. If you want to force a new download, use `force_download=True`.
  warnings.warn(
Special tokens have been added in the vocabulary, make sure the associated word embeddings are
fine-tuned or trained.

======================================================================
EXTRACTION COMPLETE
======================================================================
✓ Successfully processed: 1140/1323
✗ Skipped (missing/error): 183/1323

First 10 skipped: 000000262227.jpg, 000000262440.jpg, 000000262440.jpg, 000000262682.jpg,
000000262682.jpg, 000000262682.jpg, 000000139684.jpg, 000000000632.jpg, 000000000632.jpg,
000000000632.jpg...

Extracted shapes:
  Positive: (1140, 4096)
  Negative: (1140, 4096)
  Labels: (1140,)

Cached to: hidden_states_cache/cache_object_detection_1323_llava.npz

======================================================================
TRAINING CCS PROBE
======================================================================

Dataset split (Stratified):
  Train: 797 samples (403 pos, 394 neg)
```

```
    Test:  343 samples (173 pos, 170 neg)
    Hidden dim: 4096

  Probe architecture:
    Input: 4096
    Hidden: 256 → 128
    Output: 1 (probability)

  Training config:
    Epochs per trial: 1000
    Number of trials: 10
    Learning rate: 0.001
    Weight decay: 0.01

  ======================================================================
  TRAINING WITH MULTIPLE RANDOM RESTARTS
  ======================================================================
    Trial  1/10: Loss = 0.008419
      ✓ New best probe found!
    Trial  2/10: Loss = 0.006876
      ✓ New best probe found!
    Trial  3/10: Loss = 0.007835
    Trial  4/10: Loss = 0.007059
    Trial  5/10: Loss = 0.007925
    Trial  6/10: Loss = 0.007450
    Trial  7/10: Loss = 0.006797
      ✓ New best probe found!
    Trial  8/10: Loss = 0.007042
    Trial  9/10: Loss = 0.006951
    Trial 10/10: Loss = 0.007232

  ======================================================================
  EVALUATION WITH BEST PROBE
  ======================================================================
  Best loss: 0.006797

  Test Results:
    Overall Accuracy: 79.3% (272/343)
    Positive samples: 85.5% (173 samples)
    Negative samples: 72.9% (170 samples)

  ✓ COMPLETE: object_detection → 79.3%

  ######################################################################
  # CATEGORY: ATTRIBUTE_RECOGNITION
  ######################################################################
  LOADING DATA for category: 'attribute_recognition'
  Using 3410 samples from 'attribute_recognition'

  ======================================================================
  EXTRACTING HIDDEN STATES: ATTRIBUTE_RECOGNITION
  ======================================================================
  ⚠ Cache disabled (use_cache=False). Extracting new...

  Processing 3410 samples in batches of 40
  Searching in 2 image directories

  ======================================================================
  LOADING LLAVA MODEL: llava-hf/llava-1.5-7b-hf
  ======================================================================
  Device: cuda

  Loading checkpoint shards:   0%|          | 0/3 [00:00<?, ?it/s]
  Loading checkpoint shards:  33%|███▎      | 1/3 [00:02<00:04,  2.47s/it]
  Loading checkpoint shards:  67%|██████▋   | 2/3 [00:04<00:02,  2.36s/it]
  Loading checkpoint shards: 100%|██████████| 3/3 [00:06<00:00,  2.16s/it]
  Loading checkpoint shards: 100%|██████████| 3/3 [00:06<00:00,  2.23s/it]
  ✓ Model loaded successfully
```

```
Batches:   0%|          | 0/86 [00:00<?, ?it/s]
Batches:   1%|          | 1/86 [00:12<17:44, 12.53s/it]
Batches:   2%|▏         | 2/86 [00:26<18:28, 13.20s/it]
Batches:   3%|▎         | 3/86 [00:39<18:07, 13.10s/it]
Batches:   5%|▍         | 4/86 [00:50<17:05, 12.51s/it]
Batches:   6%|▌         | 5/86 [01:04<17:15, 12.78s/it]
Batches:   7%|▋         | 6/86 [01:15<16:19, 12.24s/it]
Batches:   8%|▊         | 7/86 [01:27<16:16, 12.36s/it]
Batches:   9%|▉         | 8/86 [01:36<14:36, 11.24s/it]
Batches:  10%|▉         | 9/86 [01:47<14:25, 11.24s/it]
Batches:  12%|█         | 10/86 [01:58<13:51, 10.94s/it]
Batches:  13%|█▏        | 11/86 [02:10<14:07, 11.30s/it]
Batches:  14%|█▎        | 12/86 [02:21<13:52, 11.25s/it]
Batches:  15%|█▍        | 13/86 [02:32<13:33, 11.15s/it]
Batches:  16%|█▌        | 14/86 [02:43<13:24, 11.17s/it]
Batches:  17%|█▋        | 15/86 [02:55<13:36, 11.50s/it]
Batches:  19%|█▊        | 16/86 [03:09<14:02, 12.03s/it]
Batches:  20%|█▉        | 17/86 [03:21<14:01, 12.19s/it]
Batches:  21%|██        | 18/86 [03:31<13:09, 11.61s/it]
Batches:  22%|██        | 19/86 [03:43<12:58, 11.61s/it]
Batches:  23%|██▏       | 20/86 [03:56<13:04, 11.89s/it]
Batches:  24%|██▎       | 21/86 [04:08<13:06, 12.10s/it]
Batches:  26%|██▍       | 22/86 [04:21<13:13, 12.40s/it]
Batches:  27%|██▌       | 23/86 [04:34<13:05, 12.47s/it]
Batches:  28%|██▋       | 24/86 [04:45<12:29, 12.09s/it]
Batches:  29%|██▊       | 25/86 [04:58<12:38, 12.44s/it]
Batches:  30%|██▉       | 26/86 [05:11<12:29, 12.49s/it]
Batches:  31%|███       | 27/86 [05:22<11:55, 12.13s/it]
Batches:  33%|███       | 28/86 [05:33<11:21, 11.75s/it]
Batches:  34%|███▏      | 29/86 [05:45<11:19, 11.91s/it]
Batches:  35%|███▎      | 30/86 [05:56<10:50, 11.61s/it]
Batches:  36%|███▍      | 31/86 [06:08<10:45, 11.73s/it]
Batches:  37%|███▌      | 32/86 [06:22<11:05, 12.32s/it]
Batches:  38%|███▋      | 33/86 [06:33<10:36, 12.01s/it]
Batches:  40%|███▊      | 34/86 [06:44<10:02, 11.58s/it]
Batches:  41%|███▉      | 35/86 [06:57<10:16, 12.08s/it]
Batches:  42%|████      | 36/86 [07:10<10:22, 12.45s/it]
Batches:  43%|████      | 37/86 [07:22<10:03, 12.31s/it]
Batches:  44%|████▏     | 38/86 [07:34<09:45, 12.21s/it]
Batches:  45%|████▎     | 39/86 [07:45<09:15, 11.82s/it]
Batches:  47%|████▍     | 40/86 [07:57<09:04, 11.84s/it]
Batches:  48%|████▌     | 41/86 [08:09<08:59, 11.98s/it]
Batches:  49%|████▋     | 42/86 [08:20<08:24, 11.46s/it]
Batches:  50%|████▊     | 43/86 [08:32<08:18, 11.59s/it]
Batches:  51%|████▊     | 44/86 [08:43<08:06, 11.58s/it]
Batches:  52%|████▉     | 45/86 [08:55<07:59, 11.68s/it]
Batches:  53%|█████     | 46/86 [09:07<07:48, 11.72s/it]
Batches:  55%|█████▏    | 47/86 [09:19<07:43, 11.88s/it]
Batches:  56%|█████▎    | 48/86 [09:32<07:43, 12.19s/it]
Batches:  57%|█████▍    | 49/86 [09:43<07:20, 11.90s/it]
Batches:  58%|█████▌    | 50/86 [09:55<07:05, 11.82s/it]
Batches:  59%|█████▌    | 51/86 [10:08<07:01, 12.04s/it]
Batches:  60%|█████▋    | 52/86 [10:19<06:42, 11.84s/it]
Batches:  62%|█████▊    | 53/86 [10:32<06:42, 12.20s/it]
```

```
Batches:  63%|██████▎     | 54/86 [10:45<06:37, 12.42s/it]
Batches:  64%|██████▍     | 55/86 [10:57<06:20, 12.26s/it]
Batches:  65%|██████▌    | 56/86 [11:09<06:05, 12.17s/it]
Batches:  66%|██████▌    | 57/86 [11:22<06:02, 12.50s/it]
Batches:  67%|██████▋    | 58/86 [11:35<05:56, 12.74s/it]
Batches:  69%|██████▊    | 59/86 [11:49<05:51, 13.01s/it]
Batches:  70%|██████▉    | 60/86 [12:01<05:27, 12.59s/it]
Batches:  71%|███████    | 61/86 [12:13<05:16, 12.68s/it]
Batches:  72%|███████    | 62/86 [12:26<05:01, 12.58s/it]
Batches:  73%|███████▏   | 63/86 [12:37<04:40, 12.20s/it]
Batches:  74%|███████▍   | 64/86 [12:50<04:32, 12.40s/it]
Batches:  76%|███████▌   | 65/86 [13:02<04:15, 12.15s/it]
Batches:  77%|███████▋   | 66/86 [13:14<04:07, 12.37s/it]
Batches:  78%|███████▊   | 67/86 [13:25<03:47, 11.96s/it]
Batches:  79%|███████▉   | 68/86 [13:35<03:24, 11.34s/it]
Batches:  80%|████████   | 69/86 [13:47<03:12, 11.30s/it]
Batches:  81%|████████   | 70/86 [13:59<03:05, 11.59s/it]
Batches:  83%|████████▏  | 71/86 [14:11<02:57, 11.81s/it]
Batches:  84%|████████▍  | 72/86 [14:23<02:44, 11.74s/it]
Batches:  85%|████████▍  | 73/86 [14:34<02:29, 11.50s/it]
Batches:  86%|████████▌  | 74/86 [14:47<02:23, 11.93s/it]
Batches:  87%|████████▋  | 75/86 [14:58<02:11, 11.93s/it]
Batches:  88%|████████▊  | 76/86 [15:11<02:00, 12.05s/it]
Batches:  90%|████████▉  | 77/86 [15:22<01:46, 11.82s/it]
Batches:  91%|█████████  | 78/86 [15:35<01:37, 12.16s/it]
Batches:  92%|█████████  | 79/86 [15:46<01:22, 11.78s/it]
Batches:  93%|█████████▏ | 80/86 [15:58<01:11, 11.85s/it]
Batches:  94%|█████████▍ | 81/86 [16:10<01:00, 12.06s/it]
Batches:  95%|█████████▍| 82/86 [16:21<00:46, 11.62s/it]
Batches:  97%|█████████▋| 83/86 [16:34<00:36, 12.14s/it]
Batches:  98%|█████████▊| 84/86 [16:46<00:23, 11.96s/it]
Batches:  99%|█████████▉| 85/86 [16:59<00:12, 12.27s/it]
Batches: 100%|██████████| 86/86 [17:02<00:00,  9.63s/it]
Batches: 100%|██████████| 86/86 [17:02<00:00, 11.89s/it]
/home/mdemirev/.local/lib/python3.11/site-packages/huggingface_hub/file_download.py:945:
FutureWarning: `resume_download` is deprecated and will be removed in version 1.0.0. Downloads
always resume when possible. If you want to force a new download, use `force_download=True`.
  warnings.warn(
Special tokens have been added in the vocabulary, make sure the associated word embeddings are
fine-tuned or trained.

======================================================================
EXTRACTION COMPLETE
======================================================================
✓ Successfully processed: 3002/3410
✗ Skipped (missing/error): 408/3410

First 10 skipped: 000000393282.jpg, 000000393282.jpg, 000000393282.jpg, 000000393469.jpg,
000000000285.jpg, 000000262440.jpg, 000000262440.jpg, 000000262440.jpg, 000000262440.jpg,
000000131386.jpg...

Extracted shapes:
  Positive: (3002, 4096)
  Negative: (3002, 4096)
  Labels: (3002,)

Cached to: hidden_states_cache/cache_attribute_recognition_3410_llava.npz

======================================================================
TRAINING CCS PROBE
======================================================================
```

```
Dataset split (Stratified):
  Train: 2101 samples (1062 pos, 1039 neg)
  Test:  901 samples (456 pos, 445 neg)
  Hidden dim: 4096

Probe architecture:
  Input: 4096
  Hidden: 256 → 128
  Output: 1 (probability)

Training config:
  Epochs per trial: 1000
  Number of trials: 10
  Learning rate: 0.001
  Weight decay: 0.01

======================================================================
TRAINING WITH MULTIPLE RANDOM RESTARTS
======================================================================
  Trial  1/10: Loss = 0.011204
    ✓ New best probe found!
  Trial  2/10: Loss = 0.011921
  Trial  3/10: Loss = 0.012789
  Trial  4/10: Loss = 0.012990
  Trial  5/10: Loss = 0.011565
  Trial  6/10: Loss = 0.011913
  Trial  7/10: Loss = 0.012190
  Trial  8/10: Loss = 0.011544
  Trial  9/10: Loss = 0.011536
  Trial 10/10: Loss = 0.011247

======================================================================
EVALUATION WITH BEST PROBE
======================================================================
Best loss: 0.011204

Test Results:
  Overall Accuracy: 75.9% (684/901)
  Positive samples: 77.9% (456 samples)
  Negative samples: 73.9% (445 samples)

✓ COMPLETE: attribute_recognition → 75.9%

######################################################################
# CATEGORY: SPATIAL_RECOGNITION
######################################################################
LOADING DATA for category: 'spatial_recognition'
Using 1030 samples from 'spatial_recognition'

======================================================================
EXTRACTING HIDDEN STATES: SPATIAL_RECOGNITION
======================================================================
⚠ Cache disabled (use_cache=False). Extracting new...

Processing 1030 samples in batches of 40
Searching in 2 image directories

======================================================================
LOADING LLAVA MODEL: llava-hf/llava-1.5-7b-hf
======================================================================
Device: cuda

Loading checkpoint shards:   0%|          | 0/3 [00:00<?, ?it/s]
Loading checkpoint shards:  33%|███▎      | 1/3 [00:02<00:04,  2.41s/it]
Loading checkpoint shards:  67%|██████▋   | 2/3 [00:04<00:02,  2.31s/it]
Loading checkpoint shards: 100%|██████████| 3/3 [00:06<00:00,  2.13s/it]
Loading checkpoint shards: 100%|██████████| 3/3 [00:06<00:00,  2.19s/it]
```

```
✓ Model loaded successfully


Batches:   0%|          | 0/26 [00:00<?, ?it/s]
Batches:   4%|▍         | 1/26 [00:12<05:21, 12.86s/it]
Batches:   8%|▊         | 2/26 [00:26<05:13, 13.08s/it]
Batches:  12%|█▏        | 3/26 [00:35<04:23, 11.47s/it]
Batches:  15%|█▌        | 4/26 [00:47<04:16, 11.67s/it]
Batches:  19%|█▉        | 5/26 [00:59<04:07, 11.78s/it]
Batches:  23%|██▎       | 6/26 [01:11<03:58, 11.91s/it]
Batches:  27%|██▋       | 7/26 [01:24<03:48, 12.04s/it]
Batches:  31%|███       | 8/26 [01:35<03:35, 12.00s/it]
Batches:  35%|███▍      | 9/26 [01:46<03:15, 11.52s/it]
Batches:  38%|███▊      | 10/26 [01:58<03:06, 11.64s/it]
Batches:  42%|████▏     | 11/26 [02:10<02:57, 11.81s/it]
Batches:  46%|████▌     | 12/26 [02:22<02:44, 11.74s/it]
Batches:  50%|█████     | 13/26 [02:32<02:29, 11.47s/it]
Batches:  54%|█████▍    | 14/26 [02:42<02:11, 10.98s/it]
Batches:  58%|█████▊    | 15/26 [02:54<02:01, 11.08s/it]
Batches:  62%|██████▏   | 16/26 [03:05<01:51, 11.12s/it]
Batches:  65%|██████▌   | 17/26 [03:16<01:40, 11.16s/it]
Batches:  69%|██████▉   | 18/26 [03:27<01:29, 11.20s/it]
Batches:  73%|███████▎  | 19/26 [03:40<01:20, 11.53s/it]
Batches:  77%|███████▋  | 20/26 [03:52<01:11, 11.84s/it]
Batches:  81%|████████  | 21/26 [04:03<00:57, 11.46s/it]
Batches:  85%|████████▍ | 22/26 [04:15<00:46, 11.70s/it]
Batches:  88%|████████▊ | 23/26 [04:26<00:34, 11.57s/it]
Batches:  92%|█████████▏| 24/26 [04:39<00:23, 11.80s/it]
Batches:  96%|█████████▌| 25/26 [04:50<00:11, 11.62s/it]
Batches: 100%|██████████| 26/26 [04:59<00:00, 10.90s/it]
Batches: 100%|██████████| 26/26 [04:59<00:00, 11.52s/it]

======================================================================
EXTRACTION COMPLETE
======================================================================
✓ Successfully processed: 880/1030
✗ Skipped (missing/error): 150/1030

First 10 skipped: 000000393282.jpg, 000000000285.jpg, 000000262682.jpg, 000000000632.jpg,
000000262895.jpg, 000000043816.jpg, 000000043816.jpg, 000000043816.jpg, 000000043816.jpg,
000000000785.jpg...

Extracted shapes:
  Positive: (880, 4096)
  Negative: (880, 4096)
  Labels: (880,)

Cached to: hidden_states_cache/cache_spatial_recognition_1030_llava.npz

======================================================================
TRAINING CCS PROBE
======================================================================

Dataset split (Stratified):
  Train: 615 samples (294 pos, 321 neg)
  Test:  265 samples (126 pos, 139 neg)
  Hidden dim: 4096

Probe architecture:
  Input: 4096
  Hidden: 256 → 128
  Output: 1 (probability)
```

```
Training config:
  Epochs per trial: 1000
  Number of trials: 10
  Learning rate: 0.001
  Weight decay: 0.01

======================================================================
TRAINING WITH MULTIPLE RANDOM RESTARTS
======================================================================
  Trial  1/10: Loss = 0.007229
    ✓ New best probe found!
  Trial  2/10: Loss = 0.009063
  Trial  3/10: Loss = 0.008533
  Trial  4/10: Loss = 0.007940
  Trial  5/10: Loss = 0.007532
  Trial  6/10: Loss = 0.007640
  Trial  7/10: Loss = 0.007630
  Trial  8/10: Loss = 0.007813
  Trial  9/10: Loss = 0.007305
  Trial 10/10: Loss = 0.007739

======================================================================
EVALUATION WITH BEST PROBE
======================================================================
Best loss: 0.007229

Test Results:
  Overall Accuracy: 71.7% (190/265)
  Positive samples: 75.4% (126 samples)
  Negative samples: 68.3% (139 samples)

✓ COMPLETE: spatial_recognition → 71.7%

======================================================================
ALL EXPERIMENTS FINISHED
======================================================================

Final Results:
  object_detection         : 79.3%
  attribute_recognition    : 75.9%
  spatial_recognition      : 71.7%

  Average                  : 75.6%

======================================================================

=== Job finished at Wed Oct 22 03:35:33 CEST 2025 with exit code: 0 ===
```