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Last login: Thu Nov 21 22:55:41 on ttys010
❯ ssh mle
Welcome to Ubuntu 22.04.5 LTS (GNU/Linux 6.8.0-48-generic x86_64)
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  .============.                                  GPU CLOUD

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/pro

Last login: Fri Nov 22 03:55:49 2024 from 52.124.35.169
ubuntu@146-235-212-176:~$ cd proj/mod3-Navxihziq/
ubuntu@146-235-212-176:~/proj/mod3-Navxihziq$ source .venv/bin/activate
(.venv) ubuntu@146-235-212-176:~/proj/mod3-Navxihziq$ python project/run_fast_tensor.py --BACKEND gpu --HIDDEN 100 --DATASET xor --RATE 0.05
/home/ubuntu/proj/mod3-Navxihziq/.venv/lib/python3.10/site-packages/numba/cuda/dispatcher.py:536: NumbaPerformanceWarning: Grid size 1 will likely result in GPU under-utilization due to low o
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  warn(NumbaPerformanceWarning(msg))
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  warn(NumbaPerformanceWarning(msg))
/home/ubuntu/proj/mod3-Navxihziq/.venv/lib/python3.10/site-packages/numba/cuda/dispatcher.py:536: NumbaPerformanceWarning: Grid size 100 will likely result in GPU under-utilization due to low
occupancy.
  warn(NumbaPerformanceWarning(msg))
/home/ubuntu/proj/mod3-Navxihziq/.venv/lib/python3.10/site-packages/numba/cuda/dispatcher.py:536: NumbaPerformanceWarning: Grid size 16 will likely result in GPU under-utilization due to low
occupancy.
  warn(NumbaPerformanceWarning(msg))
/home/ubuntu/proj/mod3-Navxihziq/.venv/lib/python3.10/site-packages/numba/cuda/dispatcher.py:536: NumbaPerformanceWarning: Grid size 7 will likely result in GPU under-utilization due to low o
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/home/ubuntu/proj/mod3-Navxihziq/.venv/lib/python3.10/site-packages/numba/cuda/dispatcher.py:536: NumbaPerformanceWarning: Grid size 8 will likely result in GPU under-utilization due to low o
ccupancy.
  warn(NumbaPerformanceWarning(msg))
/home/ubuntu/proj/mod3-Navxihziq/.venv/lib/python3.10/site-packages/numba/cuda/dispatcher.py:536: NumbaPerformanceWarning: Grid size 2 will likely result in GPU under-utilization due to low o
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ccupancy.
  warn(NumbaPerformanceWarning(msg))
/home/ubuntu/proj/mod3-Navxihziq/.venv/lib/python3.10/site-packages/numba/cuda/cudadrv/devicearray.py:888: NumbaPerformanceWarning: Host array used in CUDA kernel will incur copy overhead to/
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ccupancy.
  warn(NumbaPerformanceWarning(msg))
Epoch  0  loss  7.929135135737758 correct 29 time 3.79s time per epoch 3.79s
Epoch  10  loss  4.552853840425255 correct 39 time 18.11s time per epoch 1.65s
Epoch  20  loss  4.036263637462243 correct 46 time 32.44s time per epoch 1.54s
Epoch  30  loss  5.893117552297534 correct 42 time 46.35s time per epoch 1.50s
Epoch  40  loss  2.4576929605961153 correct 46 time 60.18s time per epoch 1.47s
Epoch  50  loss  1.535034618598493 correct 48 time 74.00s time per epoch 1.45s
Epoch  60  loss  3.2892836280156157 correct 48 time 88.12s time per epoch 1.44s
Epoch  70  loss  3.251929496623473 correct 46 time 101.94s time per epoch 1.44s
Epoch  80  loss  1.9497109010185258 correct 48 time 115.79s time per epoch 1.43s
Epoch  90  loss  1.5444758783124537 correct 48 time 129.63s time per epoch 1.42s
Epoch  100  loss  1.1125971672677224 correct 49 time 143.46s time per epoch 1.42s
Epoch  110  loss  3.6824355553173611 correct 46 time 157.32s time per epoch 1.42s
Epoch  120  loss  1.7617037055094134 correct 49 time 171.43s time per epoch 1.42s
Epoch  130  loss  1.973978643164274 correct 48 time 186.53s time per epoch 1.42s
Epoch  140  loss  0.6202532269373142 correct 49 time 201.80s time per epoch 1.43s
Epoch  150  loss  1.1928340105537187 correct 49 time 217.35s time per epoch 1.44s
Epoch  160  loss  0.4595514254053154 correct 49 time 232.68s time per epoch 1.45s
Epoch  170  loss  0.6903858274016108 correct 49 time 247.76s time per epoch 1.45s
Epoch  180  loss  0.44906698546418037 correct 49 time 262.98s time per epoch 1.45s
Epoch  190  loss  1.2440319869789267 correct 50 time 278.50s time per epoch 1.46s
Epoch  200  loss  0.30690117659696647 correct 49 time 293.75s time per epoch 1.46s
Epoch  210  loss  0.8285602489490569 correct 50 time 309.02s time per epoch 1.46s
Epoch  220  loss  0.7603352541054381 correct 50 time 324.18s time per epoch 1.47s
Epoch  230  loss  0.20266915345036 89 correct 50 time 339.34s time per epoch 1.47s
Epoch  240  loss  0.8837380207213554 correct 50 time 354.51s time per epoch 1.47s
Epoch  250  loss  0.6624675861406382 correct 50 time 369.80s time per epoch 1.47s
Epoch  260  loss  0.27289019807549864 correct 50 time 385.29s time per epoch 1.48s
Epoch  270  loss  0.44618751581125 74 correct 50 time 400.77s time per epoch 1.48s
Epoch  280  loss  0.09489040850543254 correct 50 time 416.33s time per epoch 1.48s
Epoch  290  loss  0.40863930457782 14 correct 50 time 431.48s time per epoch 1.48s
Epoch  300  loss  0.18219400200469532 correct 50 time 446.75s time per epoch 1.48s
Epoch  310  loss  0.5106873530330133 correct 50 time 462.13s time per epoch 1.49s
Epoch  320  loss  0.459958881135967 83 correct 50 time 477.67s time per epoch 1.49s
Epoch  330  loss  0.1200706412667914 correct 50 time 493.10s time per epoch 1.49s
Epoch  340  loss  0.23290781846236983 correct 50 time 508.35s time per epoch 1.49s
Epoch  350  loss  0.20696767158308954 correct 50 time 523.53s time per epoch 1.49s
Epoch  360  loss  0.24870764326832792 correct 50 time 538.91s time per epoch 1.49s
Epoch  370  loss  0.27658419721677224 correct 50 time 554.12s time per epoch 1.49s
Epoch  380  loss  0.3101088048969413 correct 50 time 568.82s time per epoch 1.49s
Epoch  390  loss  0.17399900305812901 correct 50 time 582.94s time per epoch 1.49s
Epoch  400  loss  0.25045310158620887 correct 50 time 596.92s time per epoch 1.49s
^CTraceback (most recent call last):
  File "/home/ubuntu/proj/mod3-Navxihziq/project/run_fast_tensor.py", line 145, in <module>
    ).train(data, RATE)
  File "/home/ubuntu/proj/mod3-Navxihziq/project/run_fast_tensor.py", line 100, in train
    (loss / y.shape[0]).sum().view(1).backward()
  File "/home/ubuntu/proj/mod3-Navxihziq/minitorch/tensor.py", line 278, in backward
    backpropagate(self, grad_output)
  File "/home/ubuntu/proj/mod3-Navxihziq/minitorch/autodiff.py", line 168, in backpropagate
    deriv_map[parent.unique_id] += deriv
  File "/home/ubuntu/proj/mod3-Navxihziq/minitorch/tensor.py", line 328, in __radd__
    return Add.apply(self._ensure_tensor(b), self)
  File "/home/ubuntu/proj/mod3-Navxihziq/minitorch/tensor_functions.py", line 54, in apply
    c = cls._forward(ctx, *raw_vals)
  File "/home/ubuntu/proj/mod3-Navxihziq/minitorch/tensor_functions.py", line 38, in _forward
    return cls.forward(ctx, *inps)  # type: ignore
  File "/home/ubuntu/proj/mod3-Navxihziq/minitorch/tensor_functions.py", line 91, in forward
    return t1.f.add_zip(t1, t2)
  File "/home/ubuntu/proj/mod3-Navxihziq/minitorch/cuda_ops.py", line 78, in ret
    out = a.zeros(c_shape)
  File "/home/ubuntu/proj/mod3-Navxihziq/minitorch/tensor.py", line 214, in zeros
    out._type_(self.backend)
  File "/home/ubuntu/proj/mod3-Navxihziq/minitorch/tensor.py", line 150, in _type_
    self._tensor.to_cuda_()
  File "/home/ubuntu/proj/mod3-Navxihziq/minitorch/tensor_data.py", line 218, in to_cuda_
    self._storage = numba.cuda.to_device(self._storage)
  File "/home/ubuntu/proj/mod3-Navxihziq/.venv/lib/python3.10/site-packages/numba/cuda/cudadrv/devices.py", line 232, in _require_cuda_context
    return fn(*args, **kws)
  File "/home/ubuntu/proj/mod3-Navxihziq/.venv/lib/python3.10/site-packages/numba/cuda/api.py", line 128, in to_device
    to, new = devicearray.auto_device(obj, stream=stream, copy=copy,
  File "/home/ubuntu/proj/mod3-Navxihziq/.venv/lib/python3.10/site-packages/numba/cuda/cudadrv/devicearray.py", line 889, in auto_device
    devobj.copy_to_device(obj, stream=stream)
  File "/home/ubuntu/proj/mod3-Navxihziq/.venv/lib/python3.10/site-packages/numba/cuda/cudadrv/devices.py", line 232, in _require_cuda_context
    return fn(*args, **kws)
  File "/home/ubuntu/proj/mod3-Navxihziq/.venv/lib/python3.10/site-packages/numba/cuda/cudadrv/devicearray.py", line 223, in copy_to_device
    sentry_contiguous(self)
  File "/home/ubuntu/proj/mod3-Navxihziq/.venv/lib/python3.10/site-packages/numba/cuda/cudadrv/devicearray.py", line 849, in sentry_contiguous
    core = array_core(ary)
  File "/home/ubuntu/proj/mod3-Navxihziq/.venv/lib/python3.10/site-packages/numba/cuda/cudadrv/devicearray.py", line 823, in array_core
    return ary[tuple(core_index)]
  File "/home/ubuntu/proj/mod3-Navxihziq/.venv/lib/python3.10/site-packages/numba/cuda/cudadrv/devices.py", line 231, in _require_cuda_context
    with _runtime.ensure_context():
  File "/usr/lib/python3.10/contextlib.py", line 135, in __enter__
    return next(self.gen)
  File "/home/ubuntu/proj/mod3-Navxihziq/.venv/lib/python3.10/site-packages/numba/cuda/cudadrv/devices.py", line 122, in ensure_context
    oldctx = self._get_attached_context()
KeyboardInterrupt

(.venv) ubuntu@146-235-212-176:~/proj/mod3-Navxihziq$
```