1. Log

1.1. Env

- Commit: `5c447dd84f8ae0e1d48ff9a2eae26ce8c4958101`
- Docker: `docker.io/nvidia/cuda:12.0.1-devel-ubuntu22.04`
  - install `cmake`, `python` and `git` manually
  - `export CUDACXX=$(which nvcc)`

1.2. examples/00_basic_gemm

1.2.1. Build

The example is at `examples/00_basic_gemm`.

```
# entry point is the root of the repository
mkdir build && cd build
# -DCUTLASS_LIBRARY_KERNELS=basic_gemm where `basic_gemm` is the name of the file (basic_gemm.cu)
cmake .. -DCUTLASS_NVCC_ARCHS=80 -DCUTLASS_LIBRARY_KERNELS=basic_gemm
cd examples/00_basic_gemm
# build the 00_basic_gemm excutable
make
```

2024-04-26

1.3. examples/cute/tutorial/sgemm_1.cu

- Prerequisite
  - go through `../media/docs/cute/01_layout.md` (Section 1.4)

2024-04-26

1.4. media/docs/cute/01_layout.md

Keywords: `layout`, `shape`, `stride`, `coordinate`

- layout = (shape, stride)
- coordinate:
  - `cute::idx2crd(idx, shape)` maps index/input coordinate to natural coordinate via `shape`
  - `cute::crd2idx(crd, shape, stride)` maps input coordinate/natural coordinate (an IntTuple) to index (an integer) via `shape` and `stride`