



01 搭建开发环境

配置CUDA环境

在docker容器中，需要检查 `nvcc` 是否存在，即 `which nvcc`。如果无，需执行：

```
apt update  
apt install -y nvidia-cuda-toolkit
```

工程目录

目录文件如下所示：

```
.  
└── CMakeLists.txt  
└── print_string.cu
```

1. CMakeLists.txt

```
# add executable target
add_executable(print_string print_string.cu)

# link libraries
target_link_libraries(print_string PRIVATE CUDA::cudart ${CUDA_cublas_LIBRARIES})

# set compile options
if (CMAKE_BUILD_TYPE STREQUAL "Debug")
    target_compile_options(print_string PRIVATE $<${COMPILE_LANGUAGE}:CUDA>:-G >)
endif()
```

2. print_string.cu

```
#include <cstdio>
#include <stdlib.h>
#include <cuda_runtime.h>
#include <cuda.h>

int main()
{
    printf("Hello, CUDA !\n");
    return 0;
}
```

工程链接

https://github.com/JingliangGao/CudaRoad/tree/main/reduce_case