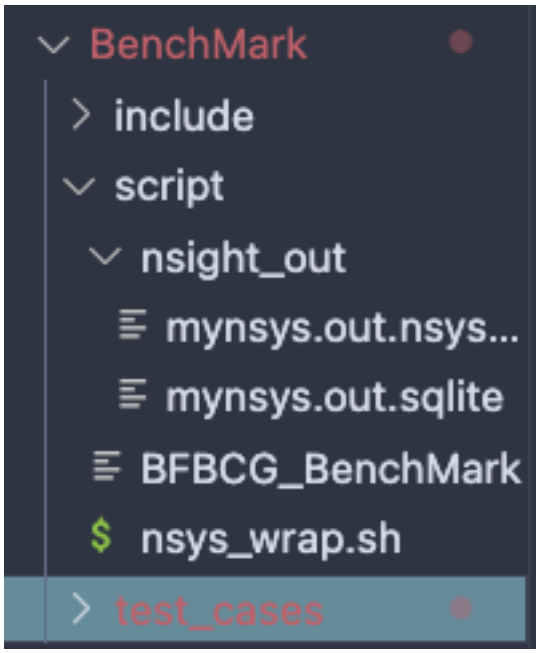
Nsight analysis

1. Compile .cu file
2. Get the executable file
3. Create a script folder
4. Move the executable file to the script folder
5. Change directory to script folder
6. Make nsight_out folder
7. Change directory to the nsight_out
8. Get the path with pwd
9. Copy the path
10. Set path like
    OUTPUT_DIR
    =~/u/kkatsumi/Research/Sandbox/BenchMark/script/nsight_out
11. Check echo $OUTPUT_DIR
12. Back to script directory
13. Creat .sh file with
    nano nsys_wrap.sh
14. Then copy and paste this shell, which is available in the same folder

```
#!/bin/bash
# Use $PMI_RANK for MPICH, $OMPI_COMM_WORLD_RANK for openmpi, and $SLURM_PROCID with srun.
if [ $SLURM_PROCID -eq 0 ]; then
  nsys profile -o ${OUTPUT_DIR}/mynsys.out --stats=true "$@"
else
  "$@"
fi
```

15. srun --account=bchn-delta-gpu --gres=gpu:1 ./nsys_wrap.sh ./BFBCG_BenchMark
    //The BFBCG_BenchMark should be replaced with the excutable file.
16. If all the steps correct, it allocate GPU and execute the file.
17. In the nsight_out, there should be available mynsys.out.nsys-rep.
18. Download it from VS code with right click option.
19. Open NVIDIA Nsight System.
20. Open the mynsys.out.nsys-rep.


BenchMark
include
script
nsight_out
mynsys.out.nsys...
mynsys.out.sqlite
BFBCG_BenchMark
nsys_wrap.sh
test_cases