

- 1) "I went through a) through c) and understand how to time code, how to submit my assignments with git, and what the recommended workflow is when it comes to working on my assignment"
-

2)

a)

```
cd somedir
```

b)

```
cat sometext.txt
```

c)

```
tail -n 5 sometext.txt
```

d)

```
tail -n 5 *.txt
```

e)

```
for i in {0..6}; do echo "$i"; done
```

3)

a) I got output "No modules loaded". Hence no module loaded.

b) **GCC version: 14.3.1** (Red Hat build 14.3.1-2, dated 20250617)

c) **CUDA modules available on Euler:**

nvidia/cuda/10.2.2, nvidia/cuda/11.0.3, nvidia/cuda/11.3.1, nvidia/cuda/11.6.0, nvidia/cuda/11.8.0, nvidia/cuda/12.0.0, nvidia/cuda/12.1.0, nvidia/cuda/12.2.0, nvidia/cuda/12.5.0, nvidia/cuda/12.9.1, nvidia/cuda/13.0.0 (default).

Additional CUDA-related toolchain modules:

nvidia/nvhpc-hpcx-cuda11/24.5, nvidia/nvhpc-hpcx-cuda12/23.11,
nvidia/nvhpc-hpcx-cuda12/24.5 (default).

d)One other software module on Euler: `valgrind/3.25.1`

Valgrind is a debugging tool that helps detect memory errors in C/C++ programs (like memory leaks and invalid memory accesses).

4)

Code is in task4.sh

5)

a)

A Slurm job typically begins execution in the directory where you ran `sbatch` (your submission directory), unless the script changes directories.

b)

`SLURM_JOB_ID` is an environment variable set inside the job that contains the unique numeric ID assigned to that submitted Slurm job.

c)

Use `squeue -u $USER` to list your queued/running jobs and their current state.

d)

Use `scancel <jobid>` to cancel a job you submitted.

e)

It requests 1 GPU as a generic resource for the job.

f)

It submits a job array with 10 tasks, where each task gets a different `SLURM_ARRAY_TASK_ID` from 0 to 9.

6)

Code is in task6.cpp

7)

“I filled out the survey”