# GCP Guide

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## General Questions

For any questions about login, ssh, slurm, singularity, you should be able to find the answer in the following two links:

`https://sites.google.com/nyu.edu/nyu-hpc`

`https://github.com/nyu-dl/cluster-support/tree/master/greene`

## Interactive Section

Before you run anything, you need to know your team number. You can find it here. Your slurm account id will be `csci_ga_2572_002-2024sp-xx` with the last two digits to be your team number. Each team will get 500 GPU hours to run their job.

After you have your account number, you can login to greene, then use `ssh burst` move to the `log-burst` node.

From here, you can request interactive sections on GCP:

- to access the shared cpu node (used for copy files and change code):
  ```
  srun --partition=interactive --account your-account-id --pty
  /bin/bash
  ```

- request an interactive one GPU node:
  ```
  srun --partition=n1s8-v100-1 --gres=gpu:1 --account your-account-id
  --time=01:00:00 --pty /bin/bash
  ```

- request an interactive two GPUs node:
  ```
  srun --partition=n1s16-v100-2 --gres=gpu:2 --account your-account-id
  --time=01:00:00 --pty /bin/bash
  ```

- request an interactive four GPUs node:
  ```
  srun --partition=n1c24m128-v100-4 --gres=gpu:4 --account your-account-id
  --time=01:00:00 --pty /bin/bash
  ```

You can also check and attach to a running job from here.

- check running jobs:
  ```
  squeue -u your-netid
  ```

- attach to a running job:
  ```
  srun --jobid your-job-id --pty /bin/bash
  ```

## Run the Demo Project

You can find the demo project at /scratch/DL23SP/demo. and the dataset at /scratch/DL23SP.

First, you should copy the whole folder to your home folder:

```
cp -r /scratch/DL23SP/demo ~/demo.
```

Then, you need to modify the demo/demo.slurm file. You add your team's account id to the --account line of the file.