

SPARTAN Instructions

1. Open Terminal. You may also open Command Prompt if using Windows.
2. Log in to SPARTAN via SSH. The password is the one you set for your Karrage account.

```
ssh quanchic@spartan.hpc.unimelb.edu.au
```
3. Upon successful login, enter the command `pwd` to check the working directory (i.e., the home directory). You should see something like “home/quanchic”.

```
pwd
```
4. Create symbolic links to the three JSON files. Please look at the first page of the specification for detailed procedures.
5. Transfer the four files (i.e., three Slurm scripts and the Python code) to your home directory using a graphical FTP client such as [FileZilla](#). You may install it on your local machine first.
6. List the files in the current working directory.

```
ls
```
7. [Create a virtual environment](#) and install the package `tabulate`. Note that replace all occurrences of 3.8.6 with **3.7.4!**

```
module load python/3.7.4
virtualenv ~/venvs/venv-3.7.4
source ~/venvs/venv-3.7.4/bin/activate
pip install tabulate
```
8. List the files in the current working directory. You will observe a new folder with the name “venvs”.

```
ls
```
9. [Submit a job](#) to SPARTAN.

```
sbatch 1node1core.slurm
```
10. Check the job’s status. You can obtain JOBID (e.g., 45606194) from the output of running the above command.

```
squeue -j JOBID
```
11. You can also check the statuses of all the submitted jobs.

```
squeue -u quanchic
```
12. List the files in the current working directory. You will observe a new file with the name such as “slurm-45606194.out”.
13. Check the file content using `nano`.

```
nano slurm-45606194.out
```

Additional Notes 1 – Passwordless SSH

Note: The following procedure applies to MacOS and Linux users. I assume you have a public-private key pair in your local machine. If you use Windows, please see [here](#).

1. Log in to your SPARTAN account via SSH.

```
ssh quanchic@spartan.hpc.unimelb.edu.au
```

2. Create a directory named .ssh under the home directory.

```
mkdir ~/.ssh
```

3. Change the permission mode of .ssh.

```
chmod 700 .ssh
```

4. Create the configuration file in .ssh.

```
touch ~/.ssh/authorized_keys
```

5. Log out of SPARTAN.

6. Append the public key to authorized_keys. Please see [here](#).

7. You can now log in to SPARTAN without entering the same password every time.

Additional info is [here](#).

Additional Notes 2 – SSH Config File

1. Create a file named config under .ssh in your local machine.

```
touch ~/.ssh/config
```

2. Copy the content [here](#) into config.

3. You can now log in to SPARTAN without typing so many characters!

```
ssh spartan
```