

- Try copying a local directory with the ubiquitin pdb file and python script for OpenMM

```
Minh-IIT-MBP2018:[~/Documents/GitHub/Chem456/static_files/tutorials]: rsync -Cua  
vz --port 2222 ubq-md dminh@data.bridges.psc.edu:/home/dminh/  
building file list ... done  
ubq-md/  
ubq-md/1ubq.pdb  
ubq-md/MD_ubq.py  
  
sent 14309 bytes  received 70 bytes  9586.00 bytes/sec  
total size is 52573  speedup is 3.66  
Minh-IIT-MBP2018:[~/Documents/GitHub/Chem456/static_files/tutorials]:
```

If you don't have them on your local computer, you can download them from github:
https://github.com/daveminh/Chem456/tree/master/static_files/tutorials/ubq-md

- Once you have installed OpenMM and copied the data, you can simply run the python script on the login terminal
- However, this is not the way that you're supposed to do things
- If you try to run a big calculation on the login terminal the system administrators will get mad at you!

```
(openmm) br006:[~]: python -m simtk.testInstallation

OpenMM Version: 7.4.1
Git Revision: 068f120206160d5151c9af0baf810384bba8d052

There are 2 Platforms available:

1 Reference - Successfully computed forces
2 CPU - Successfully computed forces

Median difference in forces between platforms:

Reference vs. CPU: 6.30481e-06

All differences are within tolerance.
(openmm) br006:[~]: ls
scripts  software  ubq-md
(openmm) br006:[~]: cd ubq-md/
(openmm) br006:[~/ubq-md]: ls
1ubq.pdb  MD_ubq.py
(openmm) br006:[~/ubq-md]: python MD_ubq.py
Minimizing...
Running Production...
#"Progress (%)" "Step" "Potential Energy (kJ/mole)" "Temperature (K)"
"Speed (ns/day)" "Time Remaining"
10.0% 100 -12937.54104464231 178.8691182900329 0 --
20.0% 200 -12786.424474924024 206.88709731573758 21.9 0:06
30.0% 300 -12425.520220420438 214.78270910359848 21.8 0:05
40.0% 400 -12333.981042607265 242.67256593500656 21.8 0:04
50.0% 500 -12170.023875048062 252.83736423813997 21.8 0:03
60.0% 600 -12043.26256936375 262.77890676191413 21.7 0:03
70.0% 700 -12022.84441006196 274.6817644781113 21.8 0:02
80.0% 800 -11904.676295196514 279.1694256963495 21.8 0:01
90.0% 900 -11873.317454425185 274.09491413581435 21.7 0:00
100.0% 1000 -11727.128648981274 275.21880048454915 21.7 0:00
Done!
```