

### Running your first LAMMPS calculation:

- 1.) Open a terminal window and navigate to where you want output files (if any) to be placed
- 2.) Save the following text as "test.txt" on your computer (you'll need the path to this file later)

```
# 3d Lennard-Jones melt

variable      x index 1
variable      y index 1
variable      z index 1
variable      t index 100

variable      xx equal 20*$x
variable      yy equal 20*$y
variable      zz equal 20*$z

units         lj
atom_style    atomic

lattice       fcc 0.8442
region        box block 0 ${xx} 0 ${yy} 0 ${zz}
create_box    1 box
create_atoms  1 box
mass          1 1.0

velocity      all create 1.44 87287 loop geom

pair_style    lj/cut 2.5
pair_coeff     1 1 1.0 1.0 2.5

neighbor      0.3 bin
neighbor_modify delay 0 every 20 check no

fix           1 all nve

thermo        100

# This is how you'd go to dump for VMD. Dumps to running directory
dump myDump all xyz 1 test.xyz

run           $t
```

- 3.) Now in terminal input `$ /path/to/your/build/of/LAMMPS -in /path/to/test.txt`

Here is what I wrote on my machine:

```
/Users/kolbt/out_of_source_build_lammps/tmkolb-lammps/src/lmp_serial -in /Users/kolbt/
desktop/test.txt
```