

## sander file

heating script from 0 k to 300 k over 200 ps

&cntrl

```
imin=0,           # run a dynamics simulation
ntx=1,            # read coordinates with no velocities
irest=0,          # don't restart the simulation
nstlim=100000,    # run simulation for 100000 steps
dt=0.002,         # each step is separated by 0.002 ps (200 ps total)
ntf=2, ntc=2,     # constrain bonds with hydrogen
ntpr=100,         # print to mdout every 100 steps
ntwx=100,         # print trajectory file every 100 steps
cut=8.0,          # non-bonded cut off of 8 Å
ntb=1,            # constant volume with periodic boundary conditions
ntp=0,            # no pressure control
ntt=3,            # control temperature using Langevin Dynamics
gamma_ln=2.0,     # Langevin collision frequency
nmropt=1,         # control NMR restraints
ig=-1,           # use a random seed
```

/

```
&wt type='TEMP0', istep1=0, istep2=100000, value1=0.0, value2=300.0 /
```

```
&wt type='END' /
```

*# Heat the system from 0 to 300 k from step 0 to end*