

Preparing a script to run MD

Why write a script?

- Molecular dynamics simulations require a lot of information about
 - Input data
 - coordinates
 - topology
 - which atoms are included in energy terms
 - parameters for functions in energy terms
 - System description
 - periodicity
 - constraints
 - Integrators
 - algorithms to propagate forward in time
 - adjust box size
 - adjust kinetic energy (temperature)
- Simulation
 - how long to run
 - how much output data to store
- OpenMM can be run from widely-used computer programming languages, python and C++, facilitating extension and combination with other code