**Blue Waters Petascale Semester Curriculum v1.0**

**Unit 10: Productivity and Visualization**

**Lesson 4: Visualization 2**

**Sample Assessment**

*Developed by* *Juan R. Perilla for the Shodor Education Foundation, Inc.*



*Except where otherwise noted, this work by The Shodor Education Foundation, Inc. is licensed under CC BY-NC 4.0. To view a copy of this license, visit*[*https://creativecommons.org/licenses/by-nc/4.0*](https://creativecommons.org/licenses/by-nc/4.0)

*Browse and search the full curriculum at*[*http://shodor.org/petascale/materials/semester-curriculum*](http://shodor.org/petascale/materials/semester-curriculum)

*We welcome your improvements! You can submit your proposed changes to this material and the rest of the curriculum in our GitHub repository at*[*https://github.com/shodor-education/petascale-semester-curriculum*](https://github.com/shodor-education/petascale-semester-curriculum)

*We want to hear from you! Please let us know your experiences using this material by sending email to* [*petascale@shodor.org*](mailto:petascale@shodor.org)

1. Briefly describe the strategy to partition the analysis of a long trajectory of a large number of particles using multiple nodes.
2. Explain how you can overcome the I/O racing conditions created by many nodes simultaneously attempting to access the same trajectory file.
3. Explain how to change the camera views from the TCL scripts without having to use an interactive GUI.
4. The best filesystem to store the data for subsequent analysis is: $SCRATCH.
5. What’s the minimum number of frames per second required to produce a smooth movie of the simulation.