Homework 13 ME5773

High Performance Computing Homework 13

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1.

For assignment 13, the tools PyVista and Paraview were used to graphically display 2 different models. Figures 1 and 2 correspond to the first part of the assignment, where the scripts quad_example.py and main_program.py were used to display an object comprised of several elements. The scalar field (dcenter) is observed in Figure 1, and the vector field is observed in Figure 2.

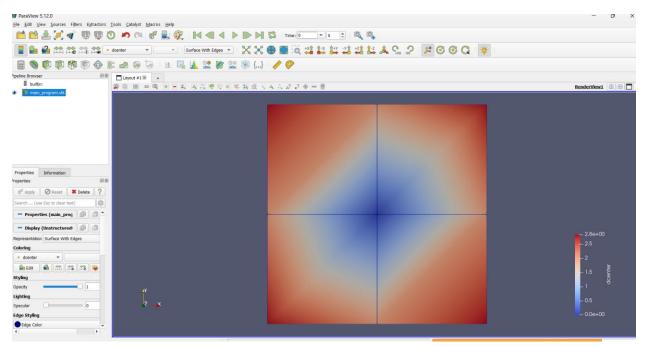


Figure 1: Display the scalar field (dcenter).

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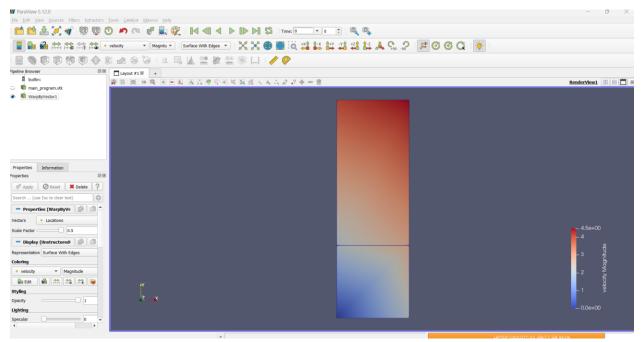


Figure 2: Display the vector field (velocity).

2.

For the second part of the assignment, the file model.vtk was loaded into Paraview and using a clip view of the model, a message can be seen, as shown in Figure 3.

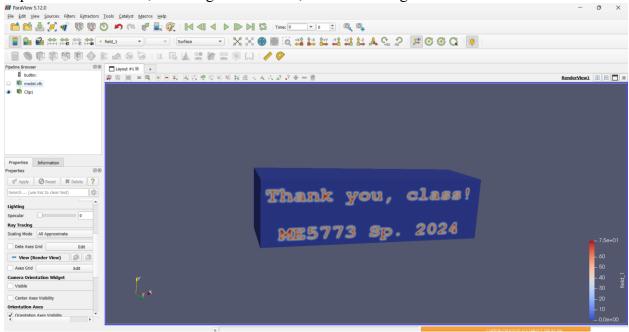


Figure 3: Clip view of the model.