

## Wondering

Answer the following question:

Do the avg. execution times vary between a single rank of MPI, a single thread of OpenMP and the serial version of the code? Why or why not?

They vary some but not much

How do the execution times of the MPI version and the OpenMP version differ? Was it what you expected? How might you explain the results?

The OpenMP times were much slower after 1 thread.  
The 4 thread levels vary significantly. I would guess  
the start up costs of using different number  
of threads.

What did you try in order to speed up the OpenMP code? What experiments did you run beyond the minimum requested in this lab? What else are you curious about in regards to these technologies?

What exactly are the startup and tear down costs  
for OpenMP since they display such a large  
difference in times compared to MPI.

## Why

Why are we doing this? This is an exercise in OMP programing. Reading about swimming only teaches you so much; at some point you need to jump into the water. It also allows us to compare MPI with OpenMP.