MPI Programming exercise: timing

Start with the time_avg program, which computes the average time taken for a computation. Compile the program with make time_avg and run it in an idev session.

Now do the following experiments.

1 Timer accuracy

The first thing you have to wonder about when you're doing timings is: how much does the timer disturb the measurements. Find a way to measure how much time the timer itself takes.

2 Collecting results

Instead of just computing the average time for a computation, gather all the timings on the root process and print them all.