Exercise 6

Programming SS 2019 - Problem Set 4

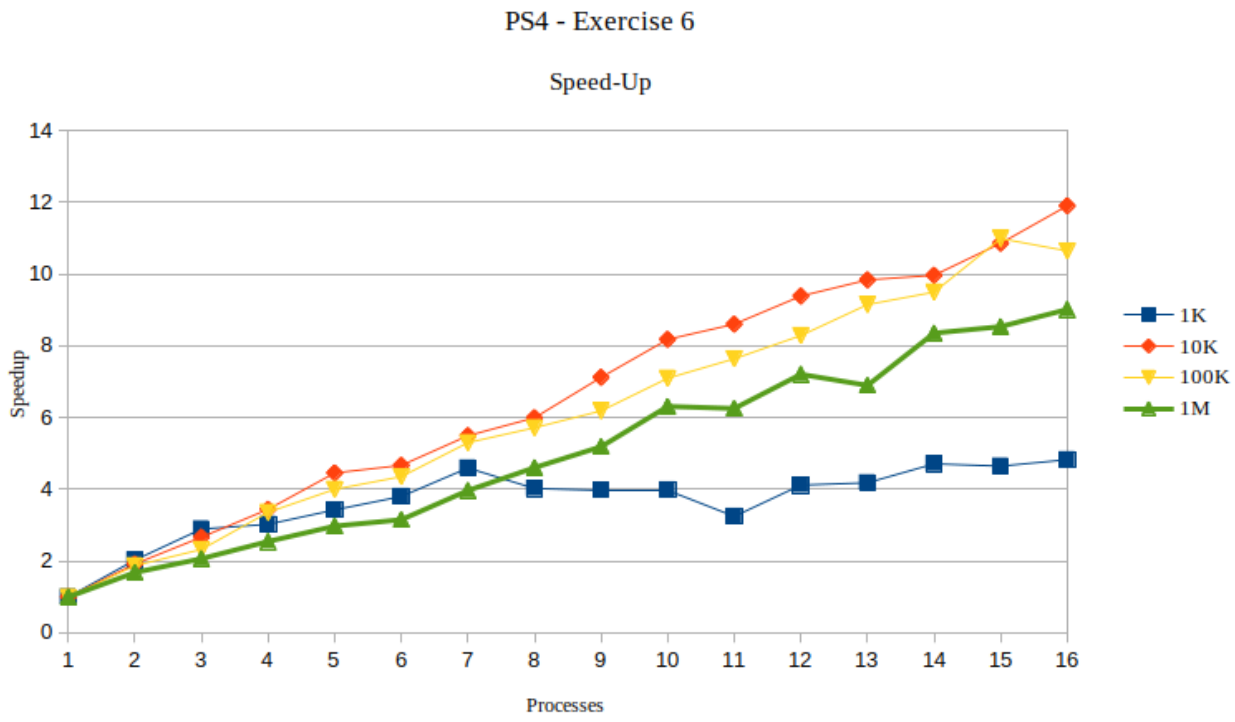
Author: *Elena Pfefferlé*, *Pascal Schenk*, *Àlvaro Morales*

We are asked to check the speed-up for combinations of MPI processes and sample points using one node on *Alphacruncher*.

Speed-up in latency is calculated as follow:

$$S = \frac{t_{old}}{t_{new}}$$

In our case, t_{old} is the runtime with **one** thread.



Note1 : The exercise asks to try combination of MPI processes between 1 & 20. However, we noticed that jobs submitted with more that 16 processes would not start;

- status *PD* (pending) and node reason *Ressources*.
- We assume that Alphacruncher doesn't allow us to go above 16 tasks in parallel.

Note2: Execution outputs are stored in *Exercise6/output/*.