

## Assignment 1 - Results

All times were measured on the VLab linux instances.

<b>Solution type</b>	<b>Number of Slaves</b>	<b>Execution time</b>	<b>Explain the result</b>
Sequential Solution	N/A	4.314s	One process does all the calculations – slowest.
Static Task Pool	2	2.511s	Points split between 2 processes – better than one process.
Static Task Pool	4	2.548s	Considering variation – not really an improvement from 2 processes! – factors causing this: more communication required, actual work is split unevenly – some processes have heavier calculations and finish later than other processes.
Static Task Pool	10	3.513s	Actually slower than 4 processes, from same factors stated above, with the communication factor amplified (communication for 10 processes) this indicates that we reached passes that point that the program is worth parallelizing further (communication is heavier than heavy())
Dynamic Task Pool	2	4.291s	Same as sequential – since still only one process does all the work – the slave process the master process allocates all the tasks to.
Dynamic Task Pool	4	1.713s	Now the actual processing time required is distributed more evenly, since while heavier tasks still process, tasks that finished easier jobs get assigned more jobs instead of idling/terminating. Better than static
Dynamic Task Pool	10	2.025s	Better than the best static time! For the same factors stated above. We also see again the diminishing returns when increasing the number of processes.