

CMP3110M Parallel Computing, Assessment Item 1

| Learning Outcome | Criterion | Pass | 2:2 | 2:1 | 1st |
|--|---|---|--|---|--|
| <p>[LO1] demonstrate practical skills in applying parallel algorithms for solving computational problems;</p> <p>[LO3] analyse parallel architectures as a means to provide solutions to complex computational problems.</p> | Code demonstration and result interpretation | <p>A working software component demonstrated, providing basic statistical summaries of the weather data (min/max/avg/std. dev.) using integer temperature values. The memory transfer and kernel execution times are provided.</p> <p>Coding style is readable.</p> <p>The answers provided indicate a basic understanding of the employed parallel patterns.</p> | <p>A working software component demonstrated, providing basic statistical summaries and some attempt at optimising the code using integer temperature values. Performance of the program is provided.</p> <p>Clear coding style with code comments.</p> <p>The answers provided indicate a fair understanding of the employed parallel patterns.</p> | <p>A working software component demonstrated, providing basic statistical summaries with well optimised kernels using real temperature values. Performance of the program is clearly reported and interpreted.</p> <p>Clear & well commented code.</p> <p>The answers provided indicate a good understanding of the employed parallel patterns.</p> | <p>An excellent implementation featuring basic statistical summaries and median-based statistics on real temperature values. Optimisations based on local memory are considered. Program performance is clearly reported and interpreted in detail.</p> <p>The code is optimised, efficient, well-structured and -commented.</p> <p>The answers provided indicate a very good understanding of the employed parallel patterns.</p> |
| Weighting | There is a single criterion for this assessment item. | | | | |