21 point scale for Advanced Scientific Computing

Exercise 2

Mark	%	Feedback Criteria	Program criteria to be satisfied
20	*100*	*Excellent with outstanding aspects*	• All parts of the exercise have been completed, performing all tasks asked for, with significant useful extra code which goes beyond the brief. • The code functions to a high standard, is clear and consistent, and robust with excellent programming style throughout and no errors. • The code is parallelised with MPI and contains multiple optimisation strategies, e.g. a cell list approach and different data distributions/load balancing strategies.
19	*95*		
18	*90*		
17	*85*	*Mostly excellent*	• All parts of the exercise have been completed, performing all tasks asked for, with useful extra code which goes beyond the brief. • The code functions to a high standard, is clear and consistent, and robust with mostly excellent programming style and no errors. • The code is parallelised with MPI and contains multiple optimisation strategies, e.g. a cell list approach and different data distributions/load balancing strategies.
16	*80*		
15	*75*	*Mostly very good*	• All parts of the exercise have been completed, performing all tasks asked for, and may contain some elements which go beyond the brief. • The code functions to a mostly very good standard, is clear and consistent, and robust with very good programming style throughout with no major weaknesses and no errors. • The code is parallelised with MPI and contains more than one additional optimisation beyond a brute force approach, e.g. a cell list approach and different data distributions/load balancing strategies.
14	*70*		
13	*65*	*Mostly good*	• All parts of the exercise have been completed, performing all tasks asked for. • The code functions to a mostly good standard, is clear and consistent, and relatively robust with good programming style with no major weaknesses. May contain minor errors. • The code is parallelised with MPI and contains at least one optimisation beyond a brute force approach, e.g. a cell list approach, or different data distributions/load balancing strategies.
12	*60*		
11	*55*	*Mostly satisfactory*	• Most parts of the exercise have been completed, performing most tasks asked for.
10	*50*		

			• The code functions to a mostly satisfactory standard, with mostly satisfactory clarity and programming style but there may be one or more errors which prevents part of it running correctly. • Only a brute force approach has been implemented, with MPI parallelisation but no further optimisations.
9	*45*	*Some satisfactory, some poor*	• Most parts of the exercise have been attempted, performing some tasks asked for. • The code works but errors prevent most of it working correctly, and/or the code may be less clear and lacking in consistency. • Only a brute force approach has been implemented, with MPI parallelisation but no further optimisations.
8	*40*		
7	*35*	*Mostly poor*	• Some parts of the exercise have been attempted but not the majority. • The code may contain serious errors and/or is unclear and lacks consistency. • Only a brute force approach has been implemented, with no attempt to improve on the efficiency or implement MPI.
6	*30*		
5	*25*	*Poor to unacceptable*	• Most of the exercise has not been completed. • The code contain serious errors. • Only a brute force approach has been implemented, with no attempt to improve on the efficiency or implement MPI.
4	*20*	*Mostly unacceptable*	• Almost all of the exercise has not been completed. • The code contains serious errors. • Only a brute force approach has been implemented, with no attempt to improve on the efficiency or implement MPI.
3	*15*		
2	*10*	*Unacceptable*	• Almost all of the exercise has not been completed. • The code is not functional. • Only a brute force approach has been implemented, with no attempt to improve on the efficiency or implement MPI.
1	*5*		
0	*0*		• Work not handed in or no significant effort made to provide functional code.