

# CAB301 Assignment 1 Marking Schema and Feedback Sheet

Student Name:

Description of algorithm and expected outcomes	Very good (6)	Good (4 – 5)	Fair (2 – 3)	Unsatisfactory (0 – 1)
	<input type="checkbox"/> The algorithm is described clearly, succinctly and accurately <input type="checkbox"/> The algorithm's basic operation is clearly identified and its choice is well justified <input type="checkbox"/> The algorithm's predicted efficiency is explained clearly, succinctly and accurately	<input type="checkbox"/> The description of the algorithm is clear, but is missing some minor detail <input type="checkbox"/> The algorithm's basic operation is clearly identified but the explanation for its choice is unclear <input type="checkbox"/> The algorithm's predicted efficiency is described correctly, but its justification is not clear	<input type="checkbox"/> The algorithm's description is difficult to follow or is missing essential information <input type="checkbox"/> The algorithm's basic operation is identified but the choice is not justified <input type="checkbox"/> The algorithm's predicted efficiency is given correctly, but is not justified or explained	<input type="checkbox"/> The algorithm's description is largely incomplete or inaccurate <input type="checkbox"/> The choice of the algorithm's basic operation is inappropriate <input type="checkbox"/> The description of the algorithm's predicted efficiency is largely incomplete or inaccurate
Marks awarded (out of 6):				
Implementation of the algorithm	Very good (6)	Good (4 – 5)	Fair (2 – 3)	Unsatisfactory (0 – 1)
	<input type="checkbox"/> The program implements the algorithm faithfully, and the correspondences between features of the algorithm and its programming language implementation are clear	<input type="checkbox"/> The program implements the algorithm faithfully, although some aspects of the correspondence between the program and the algorithm are unclear	<input type="checkbox"/> There are unexplained differences between the algorithm and its programming language implementation that may cast doubt on the validity of the experiments	<input type="checkbox"/> The programming language implementation is incomplete, or differs from the given algorithm in a way which invalidates the experiments
Marks awarded (out of 6):				
Quality of written report	Very good (4)	Good (3)	Fair (2)	Unsatisfactory (0 – 1)
	<input type="checkbox"/> The report contains no significant errors in spelling, grammar or typography <input type="checkbox"/> All reference materials used for the project are cited accurately <input type="checkbox"/> The computing environment used to develop the program and perform the experiments is described clearly <input type="checkbox"/> The report is well organised into sections and contains helpful navigational aids for the reader (headings, cross references, etc) which make the overall 'story' easy to follow	<input type="checkbox"/> The report contains a few minor errors in spelling, grammar or typography <input type="checkbox"/> All reference materials used for the project are listed, but some citations seem to be missing from the text <input type="checkbox"/> The description of the computing environment used to develop the program and perform the experiments is missing some minor details <input type="checkbox"/> The report is divided into sections and contains some navigational aids for the reader (headings, cross references, etc), but the overall 'story' is unclear in parts	<input type="checkbox"/> The report contains several errors in spelling, grammar or typography, but is still easy to read <input type="checkbox"/> A list of reference materials is given but is not clearly linked to the relevant parts of the text by citations <input type="checkbox"/> The description of the computing environment used to develop the program and perform the experiments is missing essential information needed to duplicate the experiments <input type="checkbox"/> The report is divided into sections but needs to be made easier to follow with additional navigational aids for the reader (clearer headings, more cross references, etc)	<input type="checkbox"/> The report contains numerous errors in spelling, grammar or typography that make it difficult to read <input type="checkbox"/> The list of reference materials used for the project is incomplete or inadequate <input type="checkbox"/> The computing environment used to develop the program and perform the experiments is not described adequately <input type="checkbox"/> The report is structured in a confusing way or contains insufficient navigational aids for the reader, making it difficult to understand
Marks awarded (out of 4):				

Experimental results	Very good (11 – 14)	Good (7 – 10)	Fair (3 – 6)	Unsatisfactory (0 – 2)
Marks awarded (out of 14):	<input type="checkbox"/> The program's functional correctness was tested or verified in a clear and appropriate way and the test results or program proofs are convincing <input type="checkbox"/> The way that basic operations are counted is clear and accurate (with respect to the basic operations identified for the algorithm) <input type="checkbox"/> Experiments to count the program's basic operations produced a clear trend which could be compared meaningfully with the algorithm's predicted growth <input type="checkbox"/> The way in which the average execution time of the program was measured against the problem size is clear and accurate <input type="checkbox"/> Experiments to measure the program's execution times produced a clear trend which could be compared meaningfully with the algorithm's predicted growth	<input type="checkbox"/> The way in which the program's functional correctness was tested or verified is appropriate, but the test results are not comprehensive or the formal proofs lack detail <input type="checkbox"/> The way that basic operations are counted appears to be accurate (with respect to the basic operations identified for the algorithm) but the technique's explanation is unclear in parts <input type="checkbox"/> Experiments to count the program's basic operations produced a clear trend for comparison with the predicted growth but with some large gaps <input type="checkbox"/> The way in which the execution time of the program was measured appears to be appropriate but its explanation is unclear in parts <input type="checkbox"/> Experiments to measure the program's execution times produced a clear trend but with a few unexplained outliers	<input type="checkbox"/> Claims for the program's functional correctness are not fully supported by test results or proofs <input type="checkbox"/> The way that basic operations are counted does not appear to match the algorithm, or may lead to minor inaccuracies (e.g., 'off-by-one' errors) <input type="checkbox"/> Some experimental results for counting basic operations were produced, but there were too few data points to show a definite trend <input type="checkbox"/> The way in which the execution time of the program was measured may lead to minor inaccuracies or appears to be inappropriate <input type="checkbox"/> Some experimental results for measuring execution times were produced, but there were too few data points to show a definite trend	<input type="checkbox"/> The program's functional correctness is not demonstrated or verified <input type="checkbox"/> The way that basic operations are counted is grossly inaccurate or largely incomplete <input type="checkbox"/> The results produced for counting basic operations were insufficient to allow any meaningful conclusions to be drawn from the experiment <input type="checkbox"/> No adequate method is given for measuring the program's execution time, or the method used is likely to be highly inaccurate <input type="checkbox"/> The results produced for measuring execution times were insufficient or too inaccurate to allow any meaningful conclusions to be drawn from the experiment

You are to be commended for:		Next time you need to work on:	
Total mark (out of 30):		Marker	