

ECM1421 – 2023 – CA 1 –Marking Guide for Students

Submission Point	Requirement	Marks
Task 1		
A1 Python Program 'woodenbox1.py'	Program meets functional requirements as specified.	User Prompt (2) Calculations (3) Output format (2) Program exit (3)
	User Input validation	As specified (10)
	Programming Standards	Use of functions for repeated code and for clear program structure. (2)
		Clear, readable coding. (2)
		Clear naming of variable and structures. (2)
		Comments and docstrings. (2)
		Program layout (2)
		Comments should be clear e.g., docstrings describe purpose of functions
	Program Layout	Thonny should not throw up code analysis comments.
		Code should be easily readable e.g.use of blank lines should be appropriate.
Total A (i)		30 marks
A2 Flowchart algorithm	Flowchart for woodenbox1.py	Algorithm content (flowchart symbols) and structures. (5)
Total task 1 A (ii)		5 marks
B Python Program 'woodenbox2.py'	Functional Requirements	Program runs correctly (1).
	Output	Output format as specified.(1) Length calculations correct. (1) Number of bases pieces correct. (1) Total length correct, (with rounding as specified). (1)
Total Task 1 B		5 marks
Total Task 1		40 marks

Task 2	TicketIt	
2 a Python Program 'ticketit_prep.py'	Functional Requirements	Output file created correctly. (1) Output file layout correct – columns and headings (3) Output file data correct (7 columns) (14)
	Programming Standards	Use of functions for repeated code and for clear structure. (1) Clear, readable, efficient coding of program algorithm. (2) Clear naming of variable and structures. (1) Clear and appropriate docstrings. (1)
Total 2 a		23 marks
2 b. i. Python Program 'ratings_analysis.py'	Functional Requirements	Output file created correctly. (1) Output file layout. (2) Output file data. (8)
	Programming Standards	Use of functions for repeated code and for clear structure. (1) Clear, readable, efficient coding of program algorithm. (2) Clear naming of variable and structures. (1) Clear and appropriate docstrings. (1)
Total Task 2b (i)		16 marks
Task 2 b. (ii) Ratings Visualisation	As specified.	File name. (1) Graph Format.(1) Graph Title.(1) Axis Labels.(1) Legend.(1) Data.(1) Axis Data Points. (2)
Total Task 2 b (ii)		8 marks
Total Task 2 b		24 marks
Task 2 c Python Program 'monthly_analysis.py' ,	Functional Requirements	Output file created correctly. (1) Output file layout as specified. (2) Output file data (12 columns, 20 rows).(5)
	Programming Standards	Use of functions for repeated code and clear structure. (1) Clear, readable, efficient coding of program algorithm. (2) Clear naming of variable and structures. (1) Clear and appropriate docstrings (1)
Total Task 2c		13 marks
Total Task 2		60 marks
Coursework Total		100 marks