National 5 coursework assessment task

Qualifications Scotland
Teisteanasan Alba

National 5 Computing Science Assignment
Finalised Marking Instructions

These marking instructions have been prepared by examination teams for use by Qualifications Scotland appointed markers when marking external course assessments.

The information in this document may be reproduced in support of Qualifications Scotland qualifications only on a non-commercial basis. If it is reproduced, Qualifications Scotland must be clearly acknowledged as the source. If it is to be reproduced for any other purpose, written permission must be obtained from Qualifications Scotland.

© Qualifications Scotland 2026

Marking instructions

General marking principles

Always apply these general principles. Use them in conjunction with the specific marking instructions, which identify the key features required in candidates' responses.

a Always use positive marking. This means candidates accumulate marks for the demonstration of relevant skills, knowledge and understanding; marks are not deducted for errors or omissions.

b If a candidate response does not seem to be covered by either the principles or detailed/specific marking instructions, and you are uncertain how to assess it, you must seek guidance from your team leader.

c Award marks regardless of spelling, as long as the meaning is unambiguous and does not result in a syntax error in implemented code.

d For design and implementation tasks, a sample response may be shown in the detailed marking instructions. This will not be the only valid response. You must use the detailed marking instructions and additional guidance to ensure that you consider alternative approaches and nuances of different programming languages. If in doubt, you should refer to your team leader.

e A correct response can be negated if the candidate includes an extra, incorrect response which demonstrates they do not know the correct answer. For example, in a 'state' question where the only correct answer is 'white', if the candidate answers 'white orange', you should not award the mark.

f If a candidate puts a score through their entire response to a question and makes a further attempt, you should only mark the further attempt. If no further attempt is made and the original is legible, you should mark the original response.

g In the marking instructions, if a word is underlined then it is essential; if a word is in brackets() then it is not essential. Words separated by/are alternatives.

Specific marking instructions

Task 1 — software design and development

Task	Expected response	Max mark	Additional guidance
1a	♦ validate snowfall readings (between 0 and 60 inclusive) ♦ calculate number of days snowfall lasted ♦ calculate the number of snowfall measurements included ♦ check measurements are >= 0.5 ♦ check if user has entered 0 ♦ check if there is enough data for analysis ♦ check if total >= 10 ♦ check if days >= 5 ♦ round average (to 2 decimal places)	**2**	Award **1 mark** for each bullet. Maximum **2 marks**. Take care the candidate doesn't repeat/reword processes already given: ♦ calculate the total of stored snowfall measurements ♦ calculate the number of snowfall measurements not included in analysis ♦ calculate the average snowfall
1b	♦ fixed loop or conditional with counter to display snowfall measurements ♦ for correct number of iterations ♦ display current array element within loop	**3**	

Task	Expected response	Max mark	Additional guidance

1c	**Initalisation**
	♦ initialise snowfall measurements array
	♦ initialise snowfallTotal, measurementCounter and dayCounter
	
	Conditional loop
	♦ conditional loop with correct condition <> 0
	♦ if statement to check measurement is >= 0.5 and increment measurementCounter
	♦ store snowfall measurement in array
	♦ add snowfall measurement to snowfallTotal
	♦ if statement to check measurement is <> 0 and increment dayCounter
	
	Input Validation
	♦ conditional loop with correct condition (>=0 and <= 60)
	♦ input within validation loop
	♦ Error message inside validation loop
	
	Average
	♦ Calculate average as total/valid number of readings
	♦ Store rounded average to 2 decimal places
	
	Outputs
	♦ if statement with correct conditions (snowfallTotal >= 10 and dayCounter >= 5)
	♦ display outputs with messages within if – else statement
	o number of days of snowfall
	o days not included
	o number of stored measurements
	o average
	o not enough data for analysis
	♦ display correct contents of snowfall measurements array within a loop
		15	Points 2-5 must be within the outer conditional loop and not inside the input validation loop.
			
			If following design the variables are:
			`daycounter`
			`daycounter-measurementcounter`
			`measurementcounter`
			`average`

Task	Expected response	Max mark	Additional guidance
1d	♦ snowfall measurements ○ 5 ○ 2 ○ 3 ○ 5.01, 4.9, 1.14 on separate lines ♦ average ○ 3.68	**2**	**No mark** for evidence that is simply output from code.
1e	**Fit for Purpose:** ♦ accurate comment on fit for purpose, relating to own code or the given scenario, on whether or not program produces the correct output **Efficiency:** ♦ comment on efficiency or inefficiency of own code **Readability:** ♦ comment on one aspect of readability in own code	**3**	In efficiency, candidates should not give a generic answer that could apply to any program. Answers must contain examples from the candidate's code. Efficiency examples could include comparison of: ♦ array vs multiple variables ♦ nested ifs vs individual ifs ♦ use of a loop vs replication of code Evaluation of readability must contain an element of evaluation rather than simple statements of terms. For example "I have used white space to highlight structures in my program" not "I have used white space". The candidate's code must also show evidence of this for a mark to be awarded.

Task 2 — database design and development

Task	Expected response	Max mark	Additional guidance
2a	♦ (query to) find frequent customers ♦ (query to) find members whose membership is about to expire ♦ (query to) find area use	**2**	Award **1 mark** for each bullet. Maximum **2 marks**. Accept a query to find the number of bookings made by a customer.
2b	**Customer:** ♦ membership status ♦ membership expiry date **Booking:** ♦ session type ♦ play area	**1**	Award **1 mark** for all four inputs. Wording of analysis of inputs may vary.
2c	♦ both ranges: (children) >= 1 (adult) >= 1 ♦ both restricted choice: (sessionType) – 45 minute, 90 minute, birthday party (area) – soft play, adventure, toddler	**2**	
2di	♦ `SELECT customerName, email, telephone FROM Customer, Booking WHERE Customer.customerID = Booking.customerID` ♦ `AND children >=20 AND sessionType='birthday party'` ♦ `ORDER BY children DESC;`	**3**	Order of conditions and join does not matter. Do not award any marks if the candidate's SQL is generated by the application.

2dii	`INSERT INTO Booking (bookingID, bookingDate, children, adults, sessionType, area, customerID)`
	
	`VALUES (404, '15-03-2026', 10, 4, '45 min', 'soft', 'CUST007');`
		1	`INSERT INTO Booking VALUES (404, '15-03-2026', 10, 4, '45 min', 'soft', 'CUST007');`
			
			Do not award any marks if the candidate's SQL is generated by the application.

Task	Expected response	Max mark	Additional guidance
2diii	♦ `SELECT customerName, email FROM Customer, Booking WHERE Customer.customerID=Booking.customerID` ♦ `AND sessionType = 'birthday party'` ♦ `AND member = True` ♦ `AND bookingDate >= 01/01/2026 AND bookingDate <= 31/01/2026;`	**4**	The range of dates may be implemented in other ways. Do not award any marks if the candidate's SQL is generated by the application. Accept other representations of a Boolean: Yes/1
2e	♦ WHERE clause uses AND/should use OR ♦ ORDER BY uses ASC/should be DESC ♦ no join	**2**	Award **1 mark** for each bullet. Maximum **2 marks**.

Task 3 — web design and development

Task	Expected response	Max mark	Additional guidance
3a	**The webpage should:** ♦ play a video of the barber ♦ link to the external website ♦ display a list of services ♦ display a list of care tips ♦ display contact details ♦ display a logo	**2**	Award **1 mark** for each bullet. Maximum **2 marks**. Do not accept 'have an attractive colour scheme' as not a functional requirement.
3b	♦ text elements o information on services o information on beard care o contact details ♦ media elements o video clip o external link to awards o logo	**2**	Logo must be an image.
3c	**HTML** ♦ 7 separate divs which must include 3 ids (top, voteUs, bottom) ♦ video and image with correct size ♦ both lists ♦ external Link with correct address **CSS** ♦ body o `font-family:Arial` o `font-size:12px` o `color:#333333` ♦ top o `font-size:24px` or add <h1> to html o `color:#FFEC5C` o `text-align:center` ♦ middle headings o `font-size:16px` or add <h2> to html o `color:#000000` ♦ voteUs and bottom o voteUs - `background-color: #FFEC5C` - `text-align:center` o bottom - `font-size:10px` - `text-align:center`	**8**	Candidates may implement HTML elements and CSS using alternative solutions. For example: ♦ not using the supplied ids and instead creating their own ids or classes if all specified styling in the wireframe provided from CSS are also included ♦ implementing font-family: Arial in divs The CSS includes text sizes for the top and middle section headings. These styles may be applied by adding h1, h2 elements to the headings in the html file.

Task	Expected response	Max mark	Additional guidance
3d	Description of use of onmouseover() could improve candidate's web page.	**1**	
3e	**Website not fit purpose:** ♦ no link to social media ♦ no photo gallery	**2**	

[END OF MARKING INSTRUCTIONS]