Specific marking instructions

Task	Expected response	Additional guidance	Marks available	Marks awarded	Commentary on allocation of marks	
1	**Database design and development — part A**					
1a	One mark for identifying: ♦ employee number One mark for identifying: ♦ first name ♦ surname ♦ address (or street, town) ♦ telephone number ♦ driving licence	Must identify all five attributes	2	**2**	**The candidate was awarded 2 marks because they have correctly identified all the required attributes.**	Analysis (2)
1b	One mark for completion of each row: ♦ serialNumber — PK ♦ timeCompleted — time ♦ model — restricted choice: Jazz8, Rock100 and Blues55 ♦ testPassed — Boolean ♦ employeeNumber — FK	No marks awarded for application specific field types in "Type" column (for example date/time, yes/no) Restricted choice must list all three choices	5	**1**	**The candidate was awarded 1 mark because they correctly completed the following bullet:** ♦ **employeeNumber — FK** The candidate was not awarded any further marks for the remaining bullets for the following reasons: ♦ they used an abrieviation, "Prim", which does not demonstrate that they know the correct terminology. ♦ Date/Time is an application specific field type — candidates should only use Time. ♦ whilst the candidate stated the three choices correctly, the validation type ('restricted choice') was not stated. ♦ True/False is application specific — candidates should only use Boolean.	Design (5)

Task	Expected response	Additional guidance	Marks available	Marks awarded	Commentary on allocation of marks	
1	**Database design and development — part B**					
1c	One mark each for: ♦ all fields created with correct data types ♦ primary key (serialNumber) ♦ presence check on every field ♦ restricted choice on model, with correct three options ♦ length check = 10 characters on serialNumber ♦ linked table enforcing referential integrity	Fields required: ♦ serialNumber — text ♦ dateBuilt — date ♦ timeCompleted — time ♦ model — text ♦ testPassed — Boolean ♦ employeeNumber — FK	6	**5**	**The candidate was awarded 5 marks for the following bullets:** ♦ **all fields created with correct data types** ♦ **primary key (serialNumber)** ♦ **restricted choice on model, with correct three options** ♦ **length check = 10 characters on serialNumber** ♦ **linked table enforcing referential integrity** The candidate was not awarded a mark for setting a presence check on every field as Required is set to False on the 'employeeNumber' field.	Implementation (8)
1d	One mark each for: ♦ INSERT INTO Employee ♦ correct data, in correct order	Sample answer: INSERT INTO Employee VALUES (1599, 'Jeremy', 'May', '67 Red Lane', '07923782534',true);	2	**1**	**The candidate was awarded 1 mark for INSERT INTO.** The candidate has incorrectly entered the values for the inserted employee by enclosing numerical and boolean values within inverted commas. This would return errors, we can assume that the data in the evidence at the bottom of the page was typed into the table.	

Task	Expected response	Additional guidance	Marks available	Marks awarded	Commentary on allocation of marks	
2	**Software design and development**					
2a	Array used in program		1	**1**	**The candidate was awarded 1 mark because they declared array aHits[ ] and then used it throughout the program.**	Implementation (15)
	Use of the following variables: ♦ total hits ♦ average ♦ points	Variable names may differ in code All three variables are required for 1 mark	1	**1**	**The candidate was awarded 1 mark because they declared and used the three variables listed below:** ♦ **vTotalHits** ♦ **vAverageHis** ♦ **vTeamPoints**	
	Fixed loop repeating six times (to enter player hits)		1	**1**	**The candidate was awarded 1 mark because their program uses fixed loop from 0 to <6.**	
	Input validation − conditional loop used		1	**1**	**The candidate was awarded 1 mark because they used the 'while' loop to implement input validation.**	
	Input validation − correct loop condition	hits >= 0 and hits <= 30	1	**1**	**The candidate was awarded 1 mark because the correct complex condition for while loop was used (<0 or >30).**	
	Input validation − input of player hits	Award 1 mark if not implemented within input validation loop	1	**1**	**The candidate was awarded 1 mark. Input repeated inside loop ensuring the value is re-entered.**	
	Input validation − error message		1	**1**	**The candidate was awarded 1 mark because the error message was inside the second input statement.**	
	Running total calculated correctly		1	**1**	**The candidate was awarded 1 mark. Programs loops again using** **vTotalHits = vTotalHits + aHits[i]**	

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2	**Software design and development**				
	Round function used with average		1	**0**	The candidate was awarded **0 marks** as they round vAverageHits within a print statement. This only applies to the value displayed and the original vAverageHits value calculated remains unchanged.
	Calculation of bonus points: ♦ for 1 bonus point ♦ for an additional bonus point		2	**2**	**The candidate was awarded 2 marks. vTeamPoints variable incremented twice within two correct conditional statements.**
	Selection (if) used to display message showing 1 bonus point earned	(totalHits > 50) Output must be within selection	1	**1**	**The candidate was awarded 1 mark. If statement, with correct conditions, used to display "you have scored 1 point" message.**
	Selection (if) used to display message showing additional bonus point earned	(average >= 10) Output must be within selection	1	**1**	**The candidate was awarded 1 mark. If statement, with correct conditions, used to display "you have earned an extra point" message.**
	Selection (if) used to display message showing 0 bonus points earned	(totalHits < 50) Output must be within selection	1	**1**	**The candidate was awarded 1 mark. Else statement, with correct conditions, used to display "you have not scored a point" message.**
	Matches design — same sequence of events as flow chart		1	**1**	**The candidate was awarded 1 mark. Flow of events in code matches that in flow chart.**

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2	**Software design and development**					
2b	Both test tables completed to produce the required output (1 bonus point or 2)	Table 1 hits should total 51-59 Table 2 hits should total >=60	1	**0**	No mark awarded for Test table 1 which totals 48. Test Table 2 was correct.	Testing (5)
	Printed evidence of successful run of test data in table 1	Both inputs and outputs should be printed	1	**0**	No mark awarded because the test evidence only shows outputs.	
	Printed evidence of successful run of test data in table 2	Both inputs and outputs should be printed	1	**0**	No mark awarded because the test evidence only shows outputs.	
2c	Completion of test data for input validation of player's hits for 1 mark each: ♦ extreme: 0 and 30 ♦ exceptional: any suitable, eg 1, 31	Only accept numerical answers for exceptional test data	2	**1**	**The candidate was awarded 1 mark for two correct 'extreme' values.** No mark awarded for '*exceptional*' test data as the candidate did not write a "numerical" value.	
2d	Evaluation of the following for 1 mark each: ♦ whether the program is fit for purpose, including explanation of code ♦ efficient use of coding constructs ♦ how robust the program is, including if it copes with unexpected inputs	Efficiency answers may refer to: ♦ two loops not required for inputs and running total ♦ complex selection structure could have been used in place of three "ifs" ♦ array used instead of six variables for hits ♦ single variable only required for hits if implemented in one loop (as per bullet point 1)	5	**3**	**Fitness for purpose:** **The candidate correctly evaluated fitness for purpose with reference to their own program (1 mark).** **Efficiency of your code:** **The candidate stated that they used an array instead of six individual variables (1 mark).** Robustness: 'Robustness' was not awarded a mark as the candidate did not discuss the stability of their	Evaluation (5)

Task	Expected response	Additional guidance	Marks available	Marks awarded	Commentary on allocation of marks
2	**Software design and development**				
	Evaluation of the following for 2 marks: ♦ readability — 1 mark for each comment on the readability of the candidate's own code				program. For example, how it deals with unexpected inputs. Readability: **Candidate states that they added comment lines to their code (1 mark).** The candidate could have been awarded a mark for Readability but "aligned and neat" is too vague to be awarded a mark.

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3	**Web design and development**					
3a	End-user requirements could include the following for 1 mark: ♦ view the winning pupil's photograph ♦ play the winning pupil's interview		1	**1**	**The candidate was awarded 1 mark because they correctly identified that the interview must "play".**	Analysis (3)
	Functional requirements could include two of the following for 1 mark each: ♦ must be able to play sound ♦ must be able to display the photograph ♦ must be able to display the text		2	**2**	**The candidate was awarded 2 marks because they correctly identified that the "image" must be displayed. The candidate also gave an example of text that should be displayed.**	

3b	Using the printout of the HTML file, confirm the following for 1 mark each:
	
	♦ all text and graphics content added (within structural head, title, body, tags, p, H1, div, etc)
	♦ audio tag used
	♦ link to external CSS file added in \<head\> section
		Text and graphics checklist:
		
		♦ School Name
		♦ Month
		♦ Pupil's Photo
		♦ Pupil's Name
		
		CSS for School Name Text
		`h1 { font-size: 16px;`
		`font-family: "Tahoma";`
			7	**5**	**HTML File**
					The candidate was awarded 3 marks for the following bullet points:
					♦ **all text and graphics content added (within structural head, title, body, tags, p, H1, div, etc)**
					♦ **audio tag used**
					♦ **link to external CSS file added in \<head\> section**
					
					Please note that the candidate only used \<div\> tags to display the page content. Whilst this is not good
						Implementation (7)

Task	Expected response	Additional guidance	Marks available	Marks awarded	Commentary on allocation of marks
3	**Web design and development**				

	Using the printout of the CSS file, confirm the following for one mark each:
	
	♦ School Name Text styled correctly
	♦ Month and Pupil's Name styled using a single CSS rule
	♦ graphic size correct (CSS or HTML)
	♦ background colour changed (CSS or HTML)
		`text-align: center;`
		`}`
		
		CSS for Month/Pupil's Name Text:
		`h2 { font-size: 14px;`
		`font-family: "Tahoma";`
		`text-color: white;`
		`}`
		
		CSS for <img> tag
		Internal style:
		`style="width:200px;`
		`height:250px;"`
		
		External stylesheet:
		`img { width:200px;`
		`height:250px;}`
		
		CSS for page background
		internal style:
		`<body style="background-`
		`color:blue;"`
		
		External stylesheet:
		`body {background-`
		`color:blue;`
		`}`
					practice this still displayed the content as required by the design.
					
					CSS File
					The candidate was awarded 2 marks for the following bullet points:
					
					♦ **graphic size correct (CSS or HTML)**
					♦ **background colour changed (CSS or HTML)**
					
					1st bullet: The school name has not been styled correctly as the candidate's ID does not match the HTML (pageHeader and pageheader)
					
					2nd bullet: The candidate has not identified from the design that the pupil's name and the month are the same style and should be implemented externally using a single style.