Specific marking instructions

Task 1 — software design and development

Task	Expected response	Max mark	Additional guidance
1a	♦ number of words (in sentence) to be entered ♦ each word in the sentence	**2**	For the first bullet point, accept input that would end a conditional loop, as the user could be asked if they wish to enter another word.
1b	Design showing: ♦ input of words in loop ♦ running total of word lengths in loop ♦ average calculated outside loop using "valid number of words" shown in the design	**3**	Variables names used in design will vary.

Task	Expected response		Max mark	Additional guidance
1c	♦ array of strings used to store individual words ♦ total (number of characters) initialised to 0		**2**	
	Input validation	Conditional loop used	**1**	
		Loop conditions correct	**1**	Conditions in loop may be either pre or post condition: ♦ Until >=1 and <=20 ♦ While <1 or >20 or any other valid answer.
		Input inside loop	**1**	If no validation is attempted, one of the four input validation marks may be awarded for a single input.
		Error message inside validation loop	**1**	Must be more than duplication of original input message.
	Loops	♦ two fixed loops (input and output) which match design ♦ correct number of iterations (number of words)	**2**	Award 1 mark if a conditional loop and counter is used for input.
	Use of length function to calculate number of characters		**1**	
	Running total used to calculate total number of characters		**1**	
	Average word length calculated correctly		**1**	Total number of characters divided by number of words.
	Display words on individual lines		**1**	
	If statement	If conditions both correct: ♦ < 5 ♦ >= 5 and <= 7	**1**	

Task	Expected response		Max mark	Additional guidance
		If structure matches design	**1**	Award mark for use of else if/nested if statements. Do not award mark for use of three separate if statements.
		Display reading age message	**1**	

1d(i)	Evidence of testing the supplied test data.		**1**	`The average word length is 8.4`
				`Long words - suitable for senior readers`
				
				Award mark for the correct message being displayed, even if typing errors made during input of words results in a different average.

1d(ii)	♦ a four-word sentence that has an average word length of less than 5 ♦ a three-word sentence that has an average word length between 5 and 7		**2**	
1e	Evaluation of the following: ♦ one efficiency or one inefficiency in own program code ♦ comment on one aspect of readability in the own code		**2**	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.