

6-A-Day – Computer Science GCSE (10)

Q1	<ul style="list-style-type: none">• Primary Key: PupilNumber• It is a <u>unique identifier</u>• Two pupils cannot have the same PupilNumber...• ... but they can have the same surname, firstname or ClassCode <p>1 for primary key + any other 2 bullet points</p>	[3]
Q2	<ul style="list-style-type: none">• ClassCode is used here as a <u>foreign key</u>• To link CLASS and PUPIL• Using the ClassCode, all the class details can be retrieved from the Class table• ... otherwise the class details will have to be rewritten everytime/to avoid data redundancy <div data-bbox="395 1249 1321 1451" style="border: 1px solid black; padding: 5px; margin-top: 10px;"><p>Explanations must link the two entities. e.g. "To find out in which class a pupil is" or "to create lists of students by class" is too vague as it does not require the ClassCode in CLASS to be the same as in PUPIL.</p></div>	[3]
Q3	<p>Two from:</p> <ul style="list-style-type: none">• A data structure/collection of several variables• Under one name• Each individual variable is given an index• by which it is referred within the array	[2]

Q4	<ul style="list-style-type: none">• Error messages/translator diagnostics• Produced when translating/by the compiler• ... or on the fly while writing code• Attempts to tell you what the error is• And indicate where the error is/line numbers/underlines• Editor...• ... allows you to enter the corrected code	[4]
<div style="border: 1px solid black; padding: 5px; display: inline-block;">Translator includes compiler/interpreter</div>		
Q5	<ul style="list-style-type: none">• Each character is given a numeric code• Including symbols, digits, upper and lower case• This code is then stored in binary• Each character takes 1 byte• Text is stored as a series of bytes (1 per character)• Some codes are reserved for control characters (eg TAB, Carriage Return)	[3]
Q6	<ul style="list-style-type: none">• Unicode has a much larger character set• ... and can represent many more characters/characters from all alphabets• Because unicode uses 16 bits...• ... and ASCII uses fewer/7/8 bits	[2]