

DATABASE

| QUESTION | TYPICAL ANSWER |
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| <p>If you are asked how to find the youngest or oldest, or highest or lowest – the answer should be a sort</p> <p>Eg</p> <p>Northern Oil wants to put its list of parts and suppliers in order of invoice number, largest number first.</p> | <p>SORT</p> <p>State the field name eg 'Invoice No' field And the order to sort in eg 'descending' order</p> <p>If it's alphabetically always assume it will be ascending order unless otherwise stated</p> <p>If sorting on more than one field make sure you say a COMPLEX SORT – bullet point your answer as follows:</p> <ul style="list-style-type: none"> • COMPLEX SORT • On 'Surname' field • In ascending order • AND • On 'First Name' field in • Ascending order |
| <p>If you are asked to find, or look for ...</p> <p>Eg. Simple search The manager wants a paper copy of all orders from Glasgow. Explain how they could do this.</p> <p>Complex search The ferry company wishes to know how many Land Rangers are travelling from Ullapool to Stornoway</p> | <p>This type of question will always be a SEARCH</p> <p>If searching on one field a SIMPLE SEARCH If searching on more than one field it will be a COMPLEX SEARCH</p> <p>Make sure you state the field name and the criteria you are searching for eg:</p> <ul style="list-style-type: none"> ○ Search on 'Town' field for 'Glasgow' • COMPLEX SEARCH • On 'Vehicle Type' field for 'Land Ranger' • AND • On 'Destination' field for 'Stornoway' |
| <p>Adding new information to the database</p> <p>eg a new pupil has just joined the school</p> | <p>This is creating a new record and typing in the details</p> |
| <p>New information is to be added to the records</p> | <p>This is creating a new field with the field name "e-mail" for example and entering the new information</p> |

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| Types of data | <ul style="list-style-type: none"> o Text o Number o Date o Time o Graphic o Link |
| What is a computed field? | A field that contains a formula based on other fields in the database |
| Record format/output | You can view/output records in 2 ways <ul style="list-style-type: none"> o form view (1 record at a time) o list view – in columns |
| Types of validation check: Eg: When a customer's code is typed in, the computer checks that only six characters have been entered. What type of check is this? | Length check |
| What type of check could be done on the Date of Birth field to ensure that it falls within the years 1905 to 2006? | Range check |
| Calculating storage capacity. Eg: What is the maximum number of bytes required to store one record of the database? | You will be given the field sizes –add them all up to calculate the storage for one record. |
| Calculate how many 1.44 Mb floppy disks will be needed to store 10,000 records. | 160 bytes for 1 record so for 10,000 records it will be $160 * 10000 = 1,600,000$ bytes to change to Kb divide by 1024 $1600000/1024 = 1562.5$ Kb to change to Mbs divide by 1024 $=1562.5/1024 = 1.5$ Mb to the nearest disk round up to 2 |