**Database Queries using SQL: Exercise 1**

|  |
| --- |
| If you are setting up a query directly to a database, the coding that goes on behind the scenes will most likely use a formal language called **SQL** (Structured Query Language) to set up the query.  Below is an example of a query written in SQL:  **SELECT** title, introduced, RAM  **FROM** Computer  **WHERE** RAM = 512  **ORDER BY** title **ASC**  This query will display the fields Title, Introduced and RAM from the database table Computer for any record where the RAM field is equal to 512. The records will then be sorted into ascending order of the Title field.  Although SQL is a coding language, it doesn’t follow a linear sequence SQL processes instructions in the order:   * 1. FROM – which database table is required?   2. WHERE – what criteria must be met?   3. SELECT – which fields should be displayed?   4. ORDER BY – how should the fields be sorted? |

**Task 1**

What does SQL stand for?

|  |
| --- |
|  |

Put the following steps into the correct order by numbering them 1-4.

|  |  |
| --- | --- |
| **Step No.** | **Step** |
|  | FROM |
|  | ORDER BY |
|  | SELECT |
|  | WHERE |

Match the following terms to the correct description.

|  |  |  |
| --- | --- | --- |
| **Term** |  | **Description** |
| SELECT |  | The criteria which must be met |
| FROM |  | The fields to display |
| WHERE |  | The field and order used to sort the results |
| ORDER BY |  | The table used in the query |

**Task 2**

Read each SQL statement below and fill in the blanks to complete the explanation.

|  |
| --- |
| **SELECT** firstName, surname, age  **FROM** Pupil  **WHERE** age > 16  **ORDER BY** firstName **ASC** |

This query will display the fields \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

From the database table called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

For any record where the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The records will then be sorted \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |
| --- |
| **SELECT** itemName, price, quantity  **FROM** Stock  **WHERE** price < 9.99  **ORDER BY** price **DESC** |

This query will display the fields \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

From the database table called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

For any record where the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The records will then be sorted \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |
| --- |
| **SELECT** surname, address, postCode  **FROM** Customer  **WHERE** title = "Mr"  **ORDER BY** dob **ASC** |

This query will display the fields \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

From the database table called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

For any record where the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The records will then be sorted \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_