

# Topic 9: Databases

EAL keyword sheet - Cambridge IGCSE Computer Science 0984. Write the word in your own language in the last column.

| Keyword                                | Meaning                                                                  | Example sentence                                             | In my language |
|----------------------------------------|--------------------------------------------------------------------------|--------------------------------------------------------------|----------------|
| <b>database</b>                        | An organised collection of data stored so it is easy to search and use.  | <i>The school has a database of students.</i>                |                |
| <b>table</b>                           | Data stored in rows and columns in a database.                           | <i>The Students table has 500 records.</i>                   |                |
| <b>field</b>                           | One column of a table. It holds one type of information.                 | <i>'Surname' is a field.</i>                                 |                |
| <b>record</b>                          | One row of a table. It holds all the data about one item.                | <i>Each student has one record.</i>                          |                |
| <b>data type</b>                       | The kind of data a field holds, e.g. text, integer, date.                | <i>The data type of 'Age' is integer.</i>                    |                |
| <b>primary key</b>                     | A field that is different for every record, so each record can be found. | <i>StudentID is the primary key.</i>                         |                |
| <b>foreign key</b>                     | A field in one table that links to the primary key of another table.     | <i>A foreign key links two tables.</i>                       |                |
| <b>relational database</b>             | A database with more than one table linked by keys.                      | <i>A relational database reduces repeated data.</i>          |                |
| <b>relationship</b>                    | A link between two tables.                                               | <i>There is a relationship between students and classes.</i> |                |
| <b>flat-file database</b>              | A database with only one table.                                          | <i>A spreadsheet is like a flat-file database.</i>           |                |
| <b>SQL (structured query language)</b> | A language used to ask questions of a database and change data.          | <i>SQL can find all students in Year 10.</i>                 |                |
| <b>query</b>                           | A request for data from a database.                                      | <i>I wrote a query to find all students named Ali.</i>       |                |
| <b>SELECT</b>                          | SQL word that chooses which fields to show.                              | <i>SELECT Name FROM Students</i>                             |                |
| <b>FROM</b>                            | SQL word that says which table to use.                                   | <i>SELECT * FROM Students</i>                                |                |
| <b>WHERE</b>                           | SQL word that sets a condition to filter records.                        | <i>WHERE Age &gt; 15</i>                                     |                |
| <b>ORDER BY</b>                        | SQL words that sort the results.                                         | <i>ORDER BY Surname ASC</i>                                  |                |

| Keyword             | Meaning                                                                 | Example sentence                                          | In my language |
|---------------------|-------------------------------------------------------------------------|-----------------------------------------------------------|----------------|
| <b>ASC / DESC</b>   | Ascending (smallest first) and descending (largest first).              | <i>ORDER BY Score DESC shows the highest score first.</i> |                |
| <b>SUM</b>          | SQL function that adds up the values in a field.                        | <i>SELECT SUM(Price) FROM Orders</i>                      |                |
| <b>COUNT</b>        | SQL function that counts the number of records.                         | <i>SELECT COUNT(*) FROM Students</i>                      |                |
| <b>wildcard (*)</b> | A symbol that means 'all'.                                              | <i>SELECT * shows all fields.</i>                         |                |
| <b>LIKE</b>         | SQL word used to search for a pattern.                                  | <i>WHERE Name LIKE 'A%'</i>                               |                |
| <b>AND / OR</b>     | Words used to join conditions. AND needs both to be true. OR needs one. | <i>WHERE Age &gt; 15 AND Year = 11</i>                    |                |