

# Unit 216 Database software Level 2

## Unit Summary

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Use software applications to modify simple databases and create queries using multiple selection criteria and reports. This is based on the e-skills Area of Competence Database Software, Level 2 unit.

## Skills

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You will apply the following skills:

- Planning
- Organising
- Communicating
- Using technology
- Checking
- Problem solving

## Performance Indicators

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You will:

1. Create fields for entering data with the required field characteristics, such as name, type, size and format
2. Modify field characteristics within a simple (e.g. single table, non relational) database while maintaining the integrity of existing data, such as name, type and size
3. Use appropriate tools and techniques to format data that is text and numbers
4. Format reports from simple (e.g. single table, non relational) databases using appropriate tools and techniques for page layout, such as page size, page orientation, page numbering, headers and footers and margins
5. Use automated facilities for checking data and reports, such as spell checking and sorting data
6. Check reports are formatted and laid out appropriately
7. Create and use multiple criteria queries to extract data
8. Plan and produce reports from single (e.g. single table, non relational) databases
9. Set up short cuts

## Knowledge

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You will know:

1. What types of design content are stored within the database, such as field types, field names and table names
2. How data is structured in a simple (e.g. single table, non relational) database

3. What characteristics in a database fields may have, such as data type, field name, field size and field format
4. How field characteristics can contribute to data validation
5. Why it is important to maintain data integrity
6. What methods should be used to maintain data integrity in a simple (e.g. single table, non relational) database

## Evidence requirements

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This section is aimed at the assessor and sets out the evidence requirements for this unit.

1. Evidence for this unit is generated when your candidate is carrying out real work in a private sector organisation, not-for-profit organisation or public service organisation whether full-time or part-time, paid or voluntary.
2. For this unit, evidence may be collected in an approved Realistic Working Environment or an extended work placement.
3. Simulation is allowed for this unit. Simulation refers to the simulation of work tasks and activities, not to the use of IT. The techniques involved in using IT must always be assessed at least in part through evidence gained from practical tasks or activities. All assessment must be based on the use of real IT software and hardware to carry out tasks and activities that may be simulated. Where tasks and activities are simulated they must be undertaken in an approved Realistic Working Environment.
4. Evidence must show that your candidate has consistently met the standard over a sufficient period of time for you to consider the candidate competent.
5. You may use the following assessment methods when assessing this unit:

Performance evidence	Observation	Yes
	Examination of work products	Yes
Supplementary evidence	Witness testimony	Optional
	Questions *	Yes

\* This includes verbal and written questioning, questionnaires, work based tasks, reflective accounts, case studies, professional discussion and feedback reports.

6. Your candidate needs to demonstrate the following skills and techniques by carrying out **at least two** comprehensive tasks to demonstrate their competence in:

**Techniques for entering data into databases.** Evidence will include:

- Creating fields for entering data with the required field characteristics, such as name, type, size and format

**Modifying databases to meet user requirements.** Evidence will include:

- Modifying field characteristics within a simple (e.g. single-table, non-relational) database while maintaining the integrity of existing data, such as name, type and size

**Techniques for formatting fields and database structures.** Evidence will include:

- Using appropriate tools and techniques to format data that is text and numbers

- Formatting reports from simple (e.g. single-table, non-relational) databases using appropriate tools and techniques for page layout, such as page size, page orientation, page numbering, headers and footers and margins

**Checking data in databases.** Evidence will include:

- Using automated facilities for checking data and reports, such as spell checking and sorting data
- Checking reports are formatted and laid out appropriately

**Types of queries and ways to carry them out.** Evidence will include:

- Creating and using multiple criteria queries to extract data

**Ways to produce reports from databases.** Evidence will include:

- Planning and producing reports from simple (e.g. single-table, non-relational) databases

**Ways of improving efficiency.** Evidence will include:

- Setting up shortcuts

7. Evidence generated for this unit may contribute towards Unit 201:

- Communicate information
- Plan and be accountable for your work
- Improve your own performance
- Behave in a way that supports effective working

and Unit 202

- Work to achieve your organisation's purpose and values
- Support sustainability
- Maintain security and confidentiality