City & Guilds Level 3 Database Software (7574-319)

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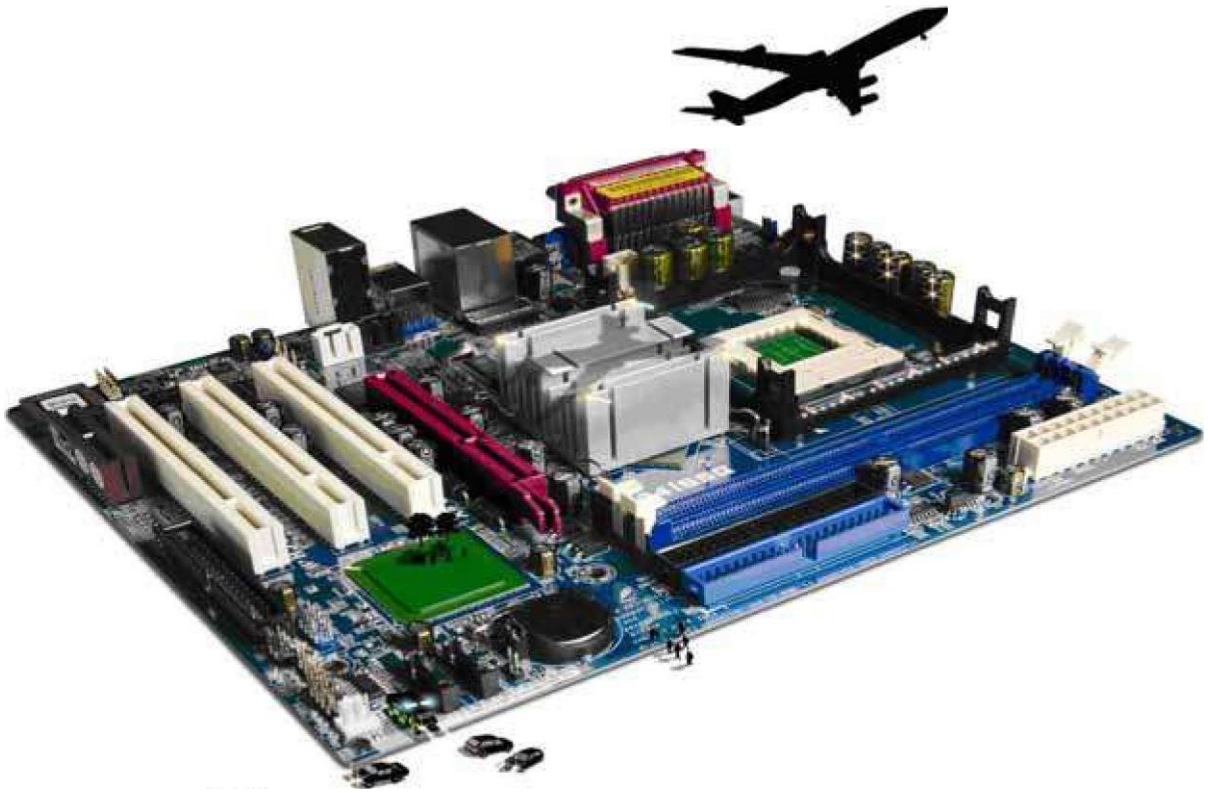
ITQ
Assignment guide for Candidates
Assignment B



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Level 3 Database Software (7574-319) Assignment B Introduction - Information for Candidates

About this document

This assignment comprises all of the assessment for Level 3 Database Software (7574-319).

Health and safety

You are responsible for maintaining the safety of others as well as your own. You are asked to work safely at all times.

You will **not** be allowed to continue with an assignment if you compromise any of the Health and Safety requirements.

Time allowance

The recommended time allowance for this assignment is **two and a half hours.**

Level 3 Database Software (7574-319)
Candidate instructions

Time allowance: two and a half hours

The assignment:

This assignment is made up of **three** tasks

- Task A - Database design
- Task B - Creating and formatting data input forms
- Task C - Using reports and queries to display information

Scenario

You are Jo Goodman, and you and your partner Chris Goodman have decided that it's time to get your finances sorted. You each have bank accounts of the following types:

- current account
- easy access deposit account
- long term savings account.

Having tried to track **all** of these accounts with a spreadsheet you decide that it's time to use a database. Your bank accounts are spread across **four** different banks.

You have designed a 'logical' database (i.e. you have not designed a database for any given software package), and the time has come to start putting that design into effect. You have spoken to a friend who has recommended that you follow some simple conventions:

1. **All** tables **will** probably need an index. Make these auto generated by the database engine to reduce your work load.

2. Field names which require two or more words should use CamelCase, for example BankAccount.

3. Indexes should be identified by the word 'id', for example BankId.

4. Foreign keys should substitute the word Code for Id, for example if a foreign key for BankId was to be required it should be called BankCode. This makes it easier to identify which columns are being used.

Read **all** of the instructions carefully and complete the tasks in the order given.

Task A - Database design

Using a database system with which you are familiar, create the following database and name it **ITQDBL3C.**

1 Create the following **four** tables, using an appropriate field length for the text fields. **Do not** accept the default field length:

Banks

Column	Type
Bankid	Auto Generated Index
Bank	Text

BankAccountTypes

Column	Type
TypeId	Auto Generated Index
Type	Text

BankAccounts

Column	Type
BankAccountId	Auto Generated Index
BankCode	Number
BankAccountTypeCode	Number
AccountNumber	Text
OwnerCode	Number
AccountName	Text

Owners

Column	Type
OwnerId	Auto Generated Index
Names	Text

2 Create relationships between the tables, using referential integrity as required.

Task B - Creating and formatting data input forms

Create forms for the following tables:

- Banks
- Owners
- BankAccountTypes

Continued over ...

2 Enter the following data, pie to be shown as lower case.

Banks	
BankId	**Bank**
Auto generated index	KGR pie
Auto generated index	Walker James pie
Auto generated index	Derwent Money pie
Auto generated index	Challoner Credit pie
Owners	
OwnerId	**Owner**
Auto generated index	Jo Goodman
Auto generated index	Chris Goodman

3 Create a form for the **BankAccounts** table.

4 Make the **BankCode, BankAccountTypeCode** and **OwnerCode** data lookup fields.

5 Using the form enter the following data:

BankAccounts

Bank Code	BankAccount TypeCode	Owner Code	Account Number	Account Name
1	2	1	01336577	J Goodman
			18496735	Jo Goodman
2		2	39475183	C Goodman
3	3		97425348	Jo Goodman
4	2	2	95027157	Chris Goodman
2	3	2	30295653	C Goodman

Note: The numbers shown above are the automatically generated index from the database.

Task C - Using reports and queries to display information

Create a report that lists all the available information about all accounts, grouped by Owner.

Continued over ...

2 Create a query that displays the following information for current accounts only:

1 Bank
2 Bank Account Type
3 Owner Name
4 Account Number
5 Account Name

Do not use ID's numbers for Owner and Bank.

Save the query as **Query1**

3 You decide to create a joint account in the name of **J & C Goodman** but it becomes apparent that the existing structure cannot accommodate this. Modify the BankAccountType and Owners tables to allow for a **joint account.**

Set up a joint account in **BankAccounts for Walker James pie** with the account number of **40006159** and the joint account details.

4 Using the conventions identified in the Scenario, create a new table that will log transactions against any of the bank accounts.

5 Using the **Answers 319 B** document, provided by your assessor, what are the advantages of a relational database in the way that it stores data, and allows for queries, over other types of application (eg spreadsheet)?

6 Using the **Answers 319 B** document, provided by your assessor give examples from this database of how data integrity is achieved.

7 Using the **Answers 319 B** document, provided by your assessor give **two** examples of why a database should be backed up.

When you have finished working:

- Sign each document above your name and label all removable storage media with your name.
- Hand all paperwork and removable storage media to your assessor.

If the assignment is taken over more than one period, all paperwork and removable media must be returned to the test supervisor at the end of each sitting.

End of assignment

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