ECDL Module 5
WORKBOOK
Databases
Microsoft Access XP Edition for ECDL Syllabus 4.5 (UK only)
ECDL Approved Courseware

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DB2.1. Using the Application

DB2.1.1. Database Concepts

SYLLABUS TASKS
- Understand what a database is.
- Understand how a database is organised in terms of tables, records, fields, and with field data types, field properties.
- Understand what a primary key is.
- Understand what an index is.
- Understand the purpose of relating tables in a database.
- Understand the importance of setting rules to ensure relationships between tables are valid.

REVIEW QUESTIONS
- What is data?
- What is a database?
- What is a relational database?
- What is a table?
- What is a record?
- What is a field?
- What is meant by 'Field data types'?
- What is meant by 'Field properties'?
- What is a primary key?
- What is an index?
- What questions should you to ask yourself whilst designing a database?

DB2.1.2. First Steps with Databases

SYLLABUS TASKS
- Open (and close) a database application.
- Open or log onto an existing database.
- Create a new database.
- Save a database to a location on a drive.
- Use available Help functions.
- Close the database.

REVIEW QUESTIONS
- How would you start Access and then close Microsoft Access?
- How would you open a database within Access?
- How would you get Help within Access?

REVIEW EXERCISES
- Click on the Windows Start icon.
- Click on All Programs.
• Click on the **Microsoft Access** icon from within the submenu displayed to start Access.

• Close the Access application by clicking on the **Close** icon, at the top-right of the application window.

• Re-start the Access application.
• Click on the **Open** icon on the Standard toolbar to display the **Open** dialog box.
• Display the contents of the STUDENT folder.

[Image of Open dialog box]

• Select the database called M5 VIEWS
• Click on the Open button to open the database.
• Close the database (not the Access application) by clicking on the Close icon in the top right of the Database window.

[Image of M5 VIEWS database]

• Click on the New icon on the Standard toolbar to display the New File pane.

[Image of New icon on toolbar]

• Select the Blank Database option.

[Image of New dialog box]

• The File New Database dialog box will be displayed.
• Enter **ECDLMODULE5** into the **File name** box and click on the **Create** button.
• Select the **What’s This?** command from the **Help** menu.

![Help menu](image)

• The mouse pointer will now have a question mark displayed next to the arrow.
• Click on any of the icons on the Standard toolbar to display a description of its function.
• Close the Access application.

### DB2.1.3. Adjust Settings

#### SYLLABUS TASKS
• Change between view modes in a table, form, report.
• Display or hide built-in toolbars.

#### REVIEW QUESTIONS
• How would you switch between views when using tables, forms or reports?
• How would you switch between Design and Datasheet View?
• How would you display or hide a toolbar?

#### REVIEW EXERCISES
• Start the Access application.
• Open the database called **M5 VIEWS**
• Select the **Tables** option from the **Objects** menu.

![Objects menu](image)

• Double click on the **Suppliers** text to open the table.
• Display the table in **Design View** by clicking the icon on the Standard toolbar.

• Display the table in **Datasheet View** by clicking the icon on the Standard toolbar.

• Display the **Formatting** Toolbar by selecting the option from the **View** menu as illustrated.

• Remove the **Formatting** Toolbar by once again selecting the **Formatting** option under the **View** menu.
• Close the Access application.
DB2.2. Tables

DB2.2.1. Main Operations

SYLLABUS TASKS
- Create and save a table and specify fields with their data types.
- Add, delete records into a table.
- Add a field to an existing table.
- Add, modify data in a record.
- Delete data in a record.
- Use the undo command.
- Navigate within a table to the next record, the previous record, the first record, the last record, a specific record.
- Delete a table.
- Save and close a table.

REVIEW QUESTIONS
- How would you create a table and specify field data types?
- How would you enter records into a table?
- How would you delete a record within a table?
- How would you add a field to an existing table?
- How would you modify data within a record?
- How would you delete data within a record?
- How would you use the Undo command?
- How would you navigate through a table to edit records?
- How would you move to a field using the mouse?
- How would you move through the table using the keyboard?
- How would you move from record to record using the scroll bar and mouse?
- How would you move to a specific record using the Edit menu?
- How would you delete a table?
- How would you save a table?
- How would you close a table?

REVIEW EXERCISES
- Open the Access application.
- Create a new database called MYMAILINGLIST.
- Open the Table Wizard by double clicking on the text Create table by using wizard.
• Ensure that **Mailing List** is selected from the **Sample Tables** list in the bottom left of the **Table Wizard** window.

• Select MailingListID from the Sample Fields list.
• Click on the right facing single arrow button.

> 

• The selected field will be added to the **Fields in my new table** list.

• Repeat this procedure to add the fields **FirstName**, **LastName**, **OrganizationName**, **Address**, **City**, **PostalCode** and **WorkPhone**.
Click on the **Next** button to proceed.
Click on the **Next** button again to display the final page of the **Table Wizard**.

Ensure that the **Enter data directly into the table** option is selected and click on the **Finish** button.
Your new table will be displayed in Datasheet view.

Click within the empty cell in the **First Name** column.
Type William
Press the **TAB** key to move the next field column.
Type **Gates**
Press the **TAB** key to move the next field column.
Type Microsoft
Press the **TAB** key to move the next field column.
Type One Microsoft Way
Press the **TAB** key to move the next field column.
Type London
Press the **TAB** key to move the next field column.
Type N1 OL
Press the **TAB** key to move the next field column.
Type 020 545 4352
The table should now resemble the illustration below.

Make up 7 more records and enter them into the table you have created.
The table should now resemble the illustration below.
• Select the 4\textsuperscript{th} record by clicking within the box at the far left of the row.

• The selected record will be highlighted.

• Press the \textbf{Delete} key. The following warning will be displayed.

• Click on the \textbf{Yes} button to delete the record.
• Switch the table to \textbf{Design View} by clicking the \textbf{View} icon on the toolbar.
• Click within the empty cell beneath the WorkPhone field and enter **WebHomePage**.
• Press the **TAB** key. By default the Text data type is selected.
• Press the **Enter** key.
• Click on the **Save** icon on the toolbar.
• Click the **View** icon the toolbar to return to Datasheet View.

You will now see your new field column displayed at the far right.

• Edit your records and add a home page address for each. To do this click within the empty cell and type the web address.
• Delete the contents of the **First Name** field for one of your records. To do this double click on the field contents to select and press the **Delete** key.
• Press **Ctrl-Z** to use the undo command to reverse your deletion.
• Experiment with using the controls at the bottom of the Table window to move from record to record.
• Save the table by clicking on the **Save** icon on the toolbar.

• Close the table clicking on the **Close** icon in the top right corner of the Table window.
• Right click on the **Mailing List** entry in the **Database** window to display a popup menu.

• From the menu select the **Delete** command. The following warning will be displayed.

  ![Microsoft Access warning](image)

• Click on the **Yes** button to delete the table.
• Close the Access application.

**DB2.2.2. Define Keys**

**SYLLABUS TASKS**
• Define a primary key.
• Index a field without duplications allowed.

**REVIEW QUESTIONS**
• How would you specify the primary key for a table?
• Why would you index a field and prevent duplication?
REVIEW EXERCISES

- Open the Access application.
- Open the database called M5 PRIMARY KEY
- Open the table called Products.
- Click the View icon on the toolbar to display the table in Design View.
- Set the field called ProductID to be the primary key. To do this, select the field by clicking on the text ProductID and then click the Primary Key icon on the toolbar.

  A key icon will be displayed next to the field name to indicate that it is the primary key for this table.

- Click on the text ProductName to select the field.
- The various field properties will be displayed at the bottom of the Table window.
- Click on the word No displayed to the right of the Indexed.
- A downward pointing arrow will appear in the far right of the Indexed row. Click on the arrow to display a menu of index options.

  Select the Yes (No Duplicates) option. This will prevent duplicate values from being entered into the ProductName field.

- Save the changes you have made to the table by clicking the Save icon on the toolbar.
- Close the database.
- Close the Access application.
DB2.2.3. Table Design/Layout

SYLLABUS TASKS
- Change field format attributes such as: field size, number format, date format.
- Understand consequences of changing field size attributes in a table.
- Create a simple validation rule for number, text, date/time, and currency.
- Change width of columns in a table.
- Move a column within a table.

REVIEW QUESTIONS
- How would you change field format attributes?
- How would you create a validation rule for a number?
- How would you create a validation rule for text?
- How would you create a validation rule for a date or time?
- How would you create a validation rule for currency?
- How would you change the width of a column?
- How would you move a column?

REVIEW EXERCISES
- Open the Access application.
- Open the database called M5 LAYOUT.
- Open the table called Products.
- Use the View icon to display the table in Design View.
- Click on the text ProductName to select the field.
- Increase the size of the ProductName field to 50 characters by typing 50 into the Field Size box.
- To ensure that the ProductName field is not left blank set the Required field property to Yes.
- Click on the text UnitPrice to select the field.
- Create a validation rule for the UnitPrice field which ensures the field is not left blank and the value entered is greater than 0. Set the Required field property to Yes and enter >0 into the Validation Rule box.
• Save the changes you have made to the table by clicking the **Save** icon on the toolbar.
• Display the table in **Datasheet View** and enter data to test your validation rules.
• Place your mouse pointer over the line between the Product Name & Category ID field headings. The pointer will change to a double headed arrow as illustrated.

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Category ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monopoly</td>
<td>3</td>
</tr>
</tbody>
</table>

• Click and drag to the right to increase the size of the Product Name field.
• Move your mouse pointer over the **Unit Price** field heading (the pointer will change to a downward pointing arrow) and click. The Unit Price field will be selected as illustrated.

<table>
<thead>
<tr>
<th>On Order</th>
<th>Unit Price</th>
<th>Reorder Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>£12.60</td>
<td>10</td>
</tr>
<tr>
<td>5</td>
<td>£11.65</td>
<td>12</td>
</tr>
<tr>
<td>0</td>
<td>£9.75</td>
<td>10</td>
</tr>
<tr>
<td>5</td>
<td>£13.45</td>
<td>5</td>
</tr>
</tbody>
</table>

• Click on the **Unit Price** field heading once more and drag the mouse to the left so that the solid bar is displayed between the Product Name and Category ID fields.

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Category ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monopoly</td>
<td>3</td>
</tr>
<tr>
<td>Cluedo</td>
<td>3</td>
</tr>
</tbody>
</table>

• Release the mouse button to move the Unit Price field so that it is displayed to the right of the Product Name field.
• Save the table by clicking the **Save** icon on the toolbar.
• Close the database.
• Close the Access application.

### DB2.2.4. Table Relationships

**SYLLABUS TASKS**

- Create a one-to-one or one-to-many relationship between tables.
- Delete relationships between tables.
- Apply rule(s) to relationships such that fields that join tables are not deleted as long as links to another table exist.

**REVIEW QUESTIONS**

- How would you create a one-to-one or one-to-many relationship between tables?
- How would you delete relationships between tables?
How would you apply rule(s) to relationships such as fields that join tables are not deleted as long as links to another table exist?

**REVIEW EXERCISES**
- Open the Access application.
- Open the database called **M5 RELATE**
- Click on the **Relationships** icon on the toolbar.

The **Relationships** window will be displayed.

Drag the **CustomerID** field from the **Customers** table and drop it on top of the **CustomerID** field in the **Orders** table. The **Edit Relationships** dialog box will be displayed.

Click on the **Create** button to establish a one-to-many relationship between the 2 fields.
Edit the relationship you have just created by double clicking on the line which connects the 2 fields. The **Edit Relationships** dialog box will be displayed once more.
• Select the Enforce Referential Integrity check box.
• Select the Cascade Update Related Fields check box.
• Select the Cascade Delete Related Records check box.
• Selecting these options will ensure that changes made to the CustomerID field in one table are reflected in the related field in the other table.
• Click on the OK button to apply the changes.
• Close the database.
• Close the Access application.
DB2.3. Forms

DB2.3.1. Working with Forms

SYLLABUS TASKS

- Open a form.
- Create and save a form.
- Use a form to enter, modify, delete records.
- Go to next record, previous record, first record, last record, specific record using form display.
- Add, modify text into Headers and Footers in a form.
- Delete a form.
- Save and close a form.

REVIEW QUESTIONS

- How would you create a form using the AutoForm Wizard?
- How would you create a form using the Form Wizard?
- How would you enter data into a form?
- How would you modify data using a form?
- How would you delete records using a form?
- How would you navigate through a form?
- How would you delete a form?
- How would you save a form?
- How would you close a form?

REVIEW EXERCISES

- Open the Access application.
- Open the database called M5 FORM.
- Select Forms from the Objects list in the Database window.

- Double click on the **Create form by using wizard** text to start the Form Wizard.
- Click on the double arrows pointing to the right to add all the fields in the Suppliers table to the form.
• Click on the **Finish** button to create the form.

• Click on the **New Record** icon displayed at the bottom of the form window.

• A blank record will be displayed allowing you to enter details of a new supplier.

• Key in the record shown below. Start by clicking within the **Supplier Name** text box. When you have finished entering data into the field, press the **TAB** key to move to the next field.
• Display the first record by typing 1 into the record number box at the bottom of the Form window and press the ENTER key.
• Change the Supplier Name to Hasboro.
• Display the third record. Delete the record by clicking the Delete Record icon on the toolbar. You will be asked to confirm the deletion, click on the Yes button.

• Experiment with using the navigation buttons along the bottom of the Form window to browse through the records.

• Display your form in Design View by clicking the View icon on the toolbar.
• Position your mouse pointer on the bottom edge of the Form Header bar. The mouse pointer will change to a double headed vertical arrow.
• Click and drag downwards to create an empty area beneath the Form Header bar.
• Repeat this process using the Form Footer bar.
• The Form window should now resemble the illustration below.
• If necessary, display the Toolbox by clicking the Toolbox icon on the toolbar.

• Click on the Label icon displayed within the Toolbox.

• Click within the empty area beneath the Form Header bar and type in a heading of Supplier Details.
• Click on the **Label** icon again.
• Click within the empty area beneath the **Form Footer** bar and type in a footer of **CCT Toys Ltd**.
• Use the **View** icon to switch back to **Form View** to see the results.
• Save your form by clicking on the **Save** icon on the toolbar.
• Close the form by clicking the **Close** icon in the top right of the **Form** window.
• Delete the Suppliers form by right-clicking on the name of the form and selecting **Delete** from the popup menu.

You will be asked to confirm the deletion, click **Yes**.
• Close the database.
• Close the Access application.
DB2.4. Retrieving Information

DB2.4.1. Main Operations

SYLLABUS TASKS
- Use the search command for a specific word, number, date in a field.
- Apply a filter to a table, form.
- Remove a filter from a table, form.

REVIEW QUESTIONS
- How would you begin a search?
- How would you search using wildcard characters?
- How would you find a specific value?
- How would you filter records in a table datasheet by selection?
- How would you filter records in a table datasheet by form?
- How would you apply the filter?
- How would you remove the filter?

REVIEW EXERCISES
- Open the Access application and open the database called M5 SEARCH.
- Open the table called Products.
- Select the Find command from the Edit drop down menu to open the Find and Replace dialog box.
- Search the table for all occurrences of the word “set”. To do this type set into the Find What box and set the other options as illustrated.
- Click on the Find Next button to highlight the first occurrence of the word “set”.
- Click on the Find Next button to highlight the next occurrence. Continue clicking on the Find Next button until all occurrences have been found & the following message is displayed.
• Click on the OK button to close the dialog box.
• Click on the Close icon in the top right of the Find and Replace dialog box.
• Apply a filter to the table so that only products with a reorder level of 5 are displayed. To do this:
  • Click on the Filter By Form icon on the toolbar.

• Click on the Clear Grid icon on the toolbar. This will ensure that you are starting with a blank filter.

• Click within the empty cell beneath the Reorder Level heading and type in your criteria, in this case 5.
• Your screen should now look like the picture below.

• Click the Apply Filter icon on the toolbar.
• Only records with a reorder level of 5 will be displayed.

• Cancel the effect of the filter by clicking the **Remove Filter** icon on the toolbar.

• Close the **Products** table without saving your changes.
• Close the Access application.

## DB2.4.2. Queries

### SYLLABUS TASKS

• Create and save a single table query, two-table query using specific search criteria.
• Add criteria to a query using any of the following operators: < (Less than), <= (Less than or equals), > (Greater than), >= (Greater than or equals), = (Equals), <> (Not equal to), And, Or.
• Edit a query by adding, removing criteria.
• Edit a query: add, remove, move, hide, unhide fields.
• Run a query.
• Delete a query.
• Save and close a query.

### REVIEW QUESTIONS

• What are queries?
• How would you create a query using the Simple Query Wizard?
• How would you select fields which you wish to add to your simple query?
• How would you create a query without the wizard?
• How would you run a query?
• How would you search using wildcard characters?
• How would you add a field to a query?
• How would you remove a field from a query?

REVIEW EXERCISES
• Open the Access application.
• Open the database called M5 QUERY
• Select Queries from the Objects list in the Database window.
• Double click on the text Create query by using wizard to start the Simple Query Wizard.

![Image of Access interface]

• Select Table: Products from the Tables/Queries list.

![Image of Tables/Queries]

• Click on the double right-facing arrow button to add all the fields in the Products table to your query.

![Image of double right-facing arrow]

• Click on the Next button to display the next page of the Simple Query Wizard. Make no changes to the options on this page.
• Click on the Next button to display the last page of the Simple Query Wizard. Give your query the name My Query and click on the Finish button.
Your query is now displayed on-screen.

Display the query you have just created in Design View by selecting the **Design View** command from the **View** drop down menu.

Add the criteria **False** to the **Discontinued** field by entering the criteria into the **Criteria** row in the **Discontinued** field column as illustrated. (You may need to use the vertical scroll bar at the bottom of the query window to bring the Discontinued field column into view.)

Display the query in Datasheet View by selecting the **Datasheet View** command from the **View** drop down menu.
You will find that products which have been discontinued are no longer displayed.

Display the query in **Design View** once more.

Add criteria to the **UnitPrice** field so that the query will only display products which have a price that is greater than or equal to 9.99 by entering `>=9.99` into the **Criteria** row.

Display the query in **Datasheet View** and confirm that your new criteria has taken effect.

Display the query in **Design View** once again.

Edit the criteria for the **UnitPrice** field so that only products which have a price which is less than or equal to 9.99 are displayed by entering `<=9.99` into the **Criteria** row.

Display the query in Datasheet View by selecting the **Datasheet View** command from the **View** drop down menu and confirm that your new criteria has taken effect.

Display the query in **Design View**.

Delete the criteria which you added to the **Discontinued** field by deleting the contents of the **Criteria** row for that field column.

Hide the fields **CategoryID** and **SupplierID** by clearing the **Show** check boxes for those fields.

Display the query in **Datasheet View** and confirm that the fields are hidden.
• Display the query in **Design View** and unhide the **CategoryID** and **SupplierID** fields by selecting the **Show** check boxes for those fields.

• Delete the field **OnOrder** from the query. To do this:
  • Move your mouse pointer to the top of the **OnOrder** field column, your mouse pointer will change to a downward pointing arrow.
  • Click the mouse button to select the field column.

  ![Diagram of query fields](image)

  • Press the **Delete** key to delete the field from the query.
  • Delete the field called **ReorderLevel** from the query in the same manor.
  • Display the query in **Datasheet View** and confirm that the fields have been deleted.
  • Display the query in **Design View** and re-add the field called **OnOrder** to the query. To do this:
    • Scroll to the bottom of the list of fields in the **Products** table as displayed in the top half of the query window.

    ![Query with OnOrder field added](image)

    • Double-click on the **OnOrder** entry in list. The **OnOrder** field will be added to the query in the next available column.
  • Move the **OnOrder** field so that it is displayed between the **ProductName** and **CategoryID** fields. To do this:
    • Move your mouse pointer to the top of the **OnOrder** field column, your mouse pointer will change to a downward pointing arrow.
    • Click the mouse button to select the field column.
    • Click the mouse button again and drag the pointer to the left so that your mouse pointer is positioned between the **ProductName** and **CategoryID** fields. A solid black bar indicates the location the field will be inserted.
• Release the mouse button to move the OnOrder field to the new location.
• Save your query by clicking the **Save** icon on the toolbar.
• Close your query by clicking the **Close** icon in the top right of the query window.
• Delete your query by clicking on the name of your query (My Query) to select it and then press the **Delete** key. You will be asked to confirm the deletion, click on **Yes**.
• Close the Access application.

### DB2.4.3. Sort Records

#### SYLLABUS TASKS

• Sort data in a table, form, query, output in ascending or descending numeric or alphabetic order.

#### REVIEW QUESTIONS

• How would you sort the records in a table datasheet?
• How would you sort records in a form?

#### REVIEW EXERCISES

• Open the Access application and open the database called **M5 SORT**
• Open the table called **Products**.
• Select the **Product Name** field by clicking on the field heading.

- Sort the records into ascending order by Product Name by clicking the **Sort Ascending** icon on the toolbar.
- Sort the records into descending order by Product Name by clicking the **Sort Descending** icon on the toolbar.
- Close the **Products** table without saving your changes.
- Open the form called **Product Form**.
- Click within the **Product Name** field to place the cursor within that field.
- Sort the form into ascending order using the Product Name field by clicking the **Sort Ascending** icon on the toolbar.
- Navigate back and forth through the records in the form using the controls at the bottom of the **Form** window to confirm that the sort has been applied.
- Sort the form into descending order using the Product Name field by clicking the **Sort Descending** icon on the toolbar.
- Navigate back and forth through the records in the form using the controls at the bottom of the **Form** window to confirm that the sort has been applied.

- Close the form.
- Open the query called **Catalog**.
- Select the **Product Name** field by clicking on the field heading.
- Sort the records into ascending order by Product Name by clicking the **Sort Ascending** icon on the toolbar.
- Sort the records into descending order by Product Name by clicking the **Sort Descending** icon on the toolbar.
- Close the query without saving your changes.
- Close the Access application.
DB2.5. Reports

DB2.5.1. Working with Reports

SYLLABUS TASKS

- Create and save a report based on a table or query.
- Change arrangement of data fields and heading within report layout.
- Group data under a specific heading (field) in a report in ascending or descending order.
- Present specific fields in a grouped report by sum, minimum, maximum, average, count, at appropriate break points.
- Add, modify text into Headers, Footers in a report.
- Delete a report.
- Save and close a report.

REVIEW QUESTIONS

- How would you create a columnar report using AutoReport Wizard?
- How would you create a tabular report using AutoReport Wizard?
- How would you create a report using Report Wizard?
- How would you select which fields to add to a report?
- How would you add grouping levels to a report?
- How would you sort records within a report?
- How would you determine the layout of a report?
- How would you determine the style of a report?
- How would you name a report?
- How would you group information using the Report Wizard?
- How would you save a report?
- How would you close a report?

REVIEW EXERCISES

- Open the Access application.
- Open the database called M5 REPORTS.
- Select Reports from the Objects list in the Database window.
- Double click on the Create report by using wizard text on the Report Wizard.
• Select **ProductName** from the **Available Fields** list and then click on the click on the right facing single arrow to add it to the **Selected Fields** lists.

• Repeat the process for the **SupplierID**, **InStock** and **UnitPrice** fields.

• Click on the **Finish** button to generate your report.

• Display the report you have just created in **Design View** by clicking the **View** icon on the toolbar.

• Drag and drop the **InStock** field and associated heading so that the **InStock** field is displayed to the right of the **Unit Price** column.
• Before...

![Before Image]

• After...

![After Image]

• Select the **Print Preview** command from the **View** drop down menu to view the effect of your changes on the report.

• Leave Print Preview mode by clicking the **Close** icon on the toolbar.

• Group records in the report using the **SupplierID** field. To do this:

• Select the **Sorting and Grouping** command from the **View** drop down menu.

• Click with the empty cell at the top of the **Field/Expression** column and select **SupplierID** from the list.
• Close the **Sorting and Grouping** window by clicking the **Close** icon in the top right of the window.
• Display the report in **Print Preview** to see the result.
• Leave Print Preview mode by clicking the **Close** icon on the toolbar.
• Open the **Sorting and Grouping** window once more and reverse the order of the sort.

• Display the report in **Print Preview** to see the result.
• Leave Print Preview mode by clicking the **Close** icon on the toolbar.
• Open the **Sorting and Grouping** window and enable the **Group Footer** option.

• If it is not already displayed, open the **Toolbox** by selecting the **Toolbox** command from the **View** drop down menu.
• Select the **Text Box** tool.

• Click and drag your mouse to create a rectangle beneath the **SupplierID Footer** bar, in line with the **In Stock** column.
Click on the label box and change the text from **TextXX:** to **Total Qty Stock:**.

Click on the text box and edit its contents, deleting the text **Unbound** and replacing it with the formula **=Sum([Instock])**.

Display the report in **Print Preview** and you will find that a total of the number of items in stock is present for each supplier.

Try replacing the Sum formula with **Min, Max, Avg** or **Count** and observe the results.

Using the **Label** command from the **Toolbox** add some text to the **Report Header** and **Report Footer** areas. Click on the **Label** icon and then click the location you wish to add your text.

Display the report in **Print Preview** to see the result.

Leave Print Preview mode by clicking the **Close** icon on the toolbar.

Save your report by clicking the **Save** icon on the toolbar.

Close your report by clicking the **Close** icon in the top right of the **Report** window.

Delete your report by right clicking on the name of the report and selecting **Delete** from the popup menu.
- You will be asked to confirm the deletion, click on Yes.
- Close the Access application.
DB2.6. Preparing Outputs

DB2.6.1. Preparing to Print

SYLLABUS TASKS
• Preview a table, form, report.
• Change report orientation: portrait, landscape. Change paper size.

REVIEW QUESTIONS
• How would you preview a table, form or report, prior to printing?
• How would you change a reports orientation?

REVIEW EXERCISES
• Open the Access application.
• Open the database called **M5 PREPRINT**
• Open the form called **Product Form**.
• Use the **Print Preview** command to view the form as it would be printed. To do this, click the **Print Preview** icon on the toolbar.

• Leave Print Preview mode by clicking the **Close** icon on the toolbar.

• Select the **Page Setup** command from the **File** drop down menu to display the **Page Setup** dialog box.
• Select the **Page** tab.
- Select the **Landscape** option.

![Page Setup Dialog Box](image)

- Click on the **OK** button to close the **Page Setup** dialog box.
- Use the Print Preview command to view the form again and note the changes.
- Close the Print Preview mode.
- Open the **Page Setup** dialog box and select the **Page** tab.
- Select a different paper size from the **Size** list.

![Page Setup Dialog Box](image)

- Click on the **OK** button to close the **Page Setup** dialog box.
- Use the Print Preview command to view the form again and note the changes.
- Leave Print Preview mode by clicking the **Close** icon on the toolbar.
- Close the form.
- Open the table called **Products**.
- Use the **Print Preview** command to view the table as it would be printed.
- Leave Print Preview mode by clicking the **Close** icon on the toolbar.
- Open the report called **Products Report**.
- Use the **Print Preview** command to view the report as it would be printed.
- Leave Print Preview mode by clicking the **Close** icon on the toolbar.
- Close the Access application.
DB2.6.2. Print options

SYLLABUS TASKS
- Print a page, selected record(s), complete table.
- Print all records using form layout, specific pages using form layout.
- Print result of a query.
- Print specific page(s) of a report, complete report.

REVIEW QUESTIONS
- How would you set what you want to print?
- How would you print a query?
- How would you print a table, query or report to a file?

REVIEW EXERCISES
- Open the Access application.
- Open the database called **M5 PRINT**
- Open the table called **Products**.
- Print the entire table by clicking the **Print** icon on the toolbar.

![](image)

- Print only the first 5 records in the table. To do this:-
  - Position your mouse pointer over the box to the left of the first record row.
  - The pointer will change to a right pointing arrow.

<table>
<thead>
<tr>
<th>Product ID</th>
<th>Product Name</th>
<th>Category ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Paddington Bear</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Monopoly</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Sage Mesadrine</td>
<td>4</td>
</tr>
</tbody>
</table>

- Click and drag the mouse downward to highlight the first 5 records.

- Select the **Print** command from the **File** drop down menu to display the **Print** dialog box.
• Select the **Selected Record(s)** option.
• Click on the **OK** button to print the records.
• Open the form called **Product Form**.
• Print the form by clicking the **Print** icon on the toolbar.
• Print only pages 2 to 4 inclusive. To do this:
  • Select the **Print** command from the **File** drop down menu.
  • Select the **Pages** option and enter 2 into the **From** box and 4 into the **To** box.

• Click on the **OK** button to print the pages.
• Open the query called **Catalog**.
• Print the query by clicking the **Print** icon on the toolbar.
• Open the report called **Products Report**.
• Print only the first page of the report. To do this:
  • Select the **Print** command from the **File** drop down menu.
  • Select the **Pages** option and enter 1 into the **From** box and 1 into the **To** box.
• Click on the **OK** button to print the first page.
• Print the entire report by clicking the **Print** icon on the toolbar.
• Close the Access application.