

Microsoft Access XP Beginners: Exercises

Lessons 1 – 8 will be used while designing a database on paper

Exercise 9. Creating a new database

Create a new database called *my new database* on the **G:** drive

Exercise 10. Closing a Database

Close the *my new database* file

Exercise 11. Opening a Database

1. Open the database file called **Orders** from the **G:** drive
2. Open the **My new database** file (Note that the **Orders** database will close!)

Exercise 12. Creating a table

Create a new table and add the following fields

Field Name	Data Type	Description
Product_Id	AutoNumber	Code given to product by database
Product_Code	Text	Code given to product by Maker
Description	Text	
Maker ID	Number	
RRP	Currency	Recommended retail price, defined by the maker

Exercise 13. Changing the field size

- 1) Set the fields in the table you created so that they have the field sizes shown below

Field Name	Field Size
Product Code	5
Description	75
Maker_ID	Long Integer

Exercise 14. Setting the Primary key in a table

- 1) Set the **Maker_ID** as the Primary Key.
- 2) Remove **Maker_ID** from being the Primary Key.
- 3) Set **Maker_ID** and **Product Code** as the Primary key
- 4) Remove **Maker_ID** and **Product Code** from being the Primary key
- 5) Set **Product_ID** as the Primary Key.

Exercise 15. Saving the table design

- 6) Close and save the table you have created as **Product**

Microsoft Access XP Beginners- Exercises

7) Create a table in design view with the following fields:

Field Name	Data Type
Supplier_ID	AutoNumber
Supplier_Name	Text
Supplier_Address	Text
Town	Text

8) Set **Supplier_ID** as the Primary key

9) Close and save the table as **Supplier**

10) Create a table in design view with the following fields

Field Name	Data Type	Description
Supplier_ID	Number	
Product_ID	Number	
Price	Currency	This is the price charged by the Supplier

11) Set **Supplier_ID** and **Product_ID** as the Primary Key

12) Close and save the table as **Product_Supplier**

13) Create a table in design view with the following fields

Field Name	Data Type
Maker_ID	AutoNumber
Web_Site	Hyperlink
Maker_Name	Text

14) Set **Maker_ID** as the Primary Key

15) Set the field size of **Maker Name** as 40

16) Close and save the table as **Maker**

Exercise 16. Table view

- 1) Open the **Product** table in Design view
- 2) Change to the Datasheet view without closing the table
- 3) Close the table
- 4) Open the **Maker** table in Datasheet view
- 5) Change to the Design view without closing the table
- 6) Close the table

Exercise 17. Changing the table design

- 1) Add the following fields to the **Supplier** table

Web_site	Hyperlink	
County	Text	(field size 20)

1. Change the order of the fields in the **Supplier** table to that shown below:

Microsoft Access XP Beginners- Exercises

Field Name	Data Type
Supplier_ID	AutoNumber
Supplier_Name	Text
Supplier_Address	Text
Town	Text
County	Text
Web_Site	Hyperlink

2. Delete the **Web_site** field.
3. Close the table and save the design changes
4. Open the **Maker** table in design view
5. Add the following fields

Contact_Name	Text
Telephone_Number	Text

6. Change the field size of **Contact name** to 25
7. Change the order of the fields to:

Field Name	Data Type
Maker Id	AutoNumber
Maker Name	Text
Contact name	Text
web site	Hyperlink
Telephone number	Text

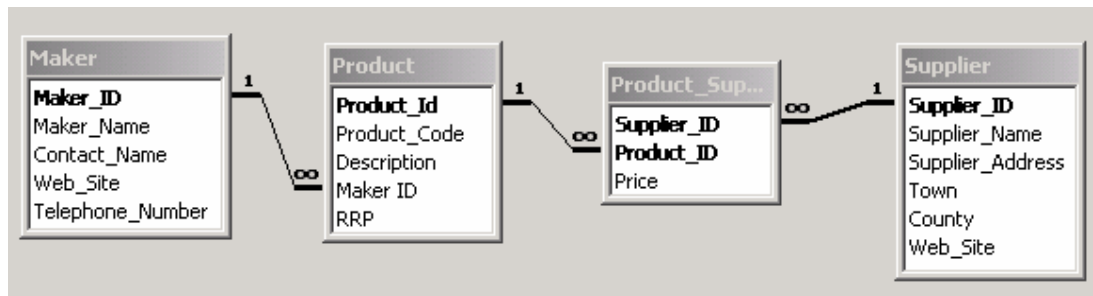
Exercise 18. Lookup Wizard

1. Open the database **Lesson 18** from the **G:** drive
2. Open the **Product** table in datasheet view – note that the **Maker_ID** is not very informative! You would need to look up the Maker's name in the **Maker** table to know which Maker produces each product!
3. Change to the design view.
4. Change the field type for **Maker_ID** to **Lookup Wizard** and tab to the next field
5. Follow the Lookup Wizard, looking up values from the **Maker** table and including **Maker_ID** and **Maker name**.
6. Change to the Datasheet view and test the **Maker_ID** field to see the change.
7. Close the table
8. Open the table **Product_Supplier** in datasheet view. Again, the table has codes only. Not very helpful if you don't remember what the codes represent!
9. Change the data type of the **Supplier_ID** to **Lookup Wizard** and tab to the next field
10. Use the Lookup Wizard to set the field to lookup values from the **Supplier** table (use the **Supplier_ID** and the **Supplier Name**)
11. Change to the Datasheet view and test the field.
12. Change back to the Design view
13. Change the data type of the **Product_ID** to **Lookup Wizard** and tab to the next field

14. Use the Lookup Wizard to set the field to lookup values from the **Product** table (use the **Product_ID**, **Description** and **Product Code** – in that order!!)
15. Change to the Datasheet view and test the field.
16. Close the table
17. Close the database

Exercise 19. Relationships

1. Open the **My new database** file
2. Open the **Relationships** window and add all the tables
3. Set up a “proper” relationship between the **Maker_ID** and the **Product_ID**
Can you? What is the reason?
4. Set up relationships as shown below:



Exercise 20. Changing the layout of the Relationships window

1. Open the **Lesson 18** database
2. Open the *Relationships* window and note the relationships which were created when you used the **Lookup Wizard**
3. Remove the relationship between **Supplier** and **Product_Supplier**.
4. Edit the relationship between **Product_Supplier** and **Product** so that the *Integrity* is enforced.
5. Add a relationship between **Supplier** and **Product_Supplier**, ensuring that *Integrity* is enforced.
6. Add the **Maker** table (if it is not already shown!)
7. Edit the relationship between **Product** and **Maker** so that the *Integrity* is enforced.
8. Make the **Supplier** and **Product** tables tall and wide enough to show all the fields in the table

Exercise 21. Adding data to a table

1. Open the **Lesson 21** database
2. Add the following to the **Maker** table and close it. (Note that the **Maker_ID** is created automatically)

Maker_Name	Contact_Name	Web_site	Telephone_number
Sister	Gerald Frimtom	www.sister.com	038 437921
Maxi	Mrs Havers	www.maxi.co.uk	907 44899

Microsoft Access XP Beginners- Exercises

3. Add the following data to the **Product** table, using **CTRL '** whenever possible, and close the table. (Note that the **Product_ID** is created automatically)

Product_Code	Description	Maker	RRP
SIS56	Photographic Paper - 10 sheets	Sister	£8.99
SIS43	Transparency film - Laser	Sister	£23.99
MX78	Correction Fluid - pack of 10	Maxi	£8.79
MX378	Suspension files -50	Maxi	£31.99

Exercise 22. Editing and deleting data in a table

1. Open the Product Table
2. Edit the *Description* of product **PC342** to read **A4 Paper** and undo the change.
3. Edit the *Product Code* of product **PC342** to read **P34** and the *Description* to read **Stapler** and undo the changes.
4. Edit the *Product Code* of product **PC342** to read **P34** and the *Description* to read **Stapler** and move to the next record
5. Undo the changes made to the previous record
6. Delete the product with the *Description* **Rubbish**

Exercise 23. Formatting data in a table

1. Open the **Maker** table
2. Make the data in **Contact_Name** show in magenta
3. Make the data in **Maker_Name** show in upper case
4. Close and save the **Maker** table
5. Open the **Product** table
6. Make the data in **RRP** show a € sign instead of the £
7. Close and save the **Product** table

Exercise 24. Controlling Input to a table using an Input Mask

1. Open the **Product** table in *design* view
2. Set the **Product_Code** field so that the user can only enter data in the form of two initial letters of the alphabet and then three numbers. The user **must** put all five characters in
3. Change to the *datasheet* view and enter a new record with the **Product_Code** FHT231. Can you?
4. Enter the **Product_Code** FD23 - can you?
5. Enter the **Product_Code** FD231 - can you?
6. Close and save the **Product** table

Exercise 25. Controlling Input to a table using Validation

1. Using the database **Lesson 21** database:
2. Open the **Order** table in *design* view
3. Set validation so that the **Order_date** must be between 1/1/2003 and today's date (inclusive)
4. Change to the *datasheet* view and try to enter tomorrow's date
5. Try to enter 31/12/02 – note the error message
6. Change back to the *design* view and add validation text explaining what dates may be added.
7. Change back to the *datasheet* view and enter tomorrow's date – note the error message!
8. Enter today's date
9. Add another record leaving the date blank - can you?
10. Change the validation for the **Order_date** so that it can be left blank.
11. Add another record leaving the date blank
12. Close and save the table

Exercise 26. Setting other Field Properties in a table

1. Open the **Product** table in *design* view and create an index for **Description** which does not allow duplicates
2. Change to the *datasheet* view and add two records as shown below

Product_Code	Description	Maker	RRP
AB487	FlipChart Marker	Perker	£2.55
AH123	FlipChart Marker	Birol	£3.24

(Remember to use **Ctrl ')**

Can you?

3. Change the index for **Description** to allow duplicates and add the second record again.
4. Close and save the table
5. Set the default value for **Quantity** in the **Order_line** table to 1
6. Add a new record
7. Close and save the table
8. Set the **Supplier Name** in **Supplier** as a *required* field
9. Try to add a record in **Supplier** without a **Supplier_Name**
10. Close and save the table

Exercise 27. Create a new database at this stage!

1. Open the **Orders** table from the **G:** drive
2. Look at the relationships Window and note the set up of the database
3. Create a new database called **OrdersFrontEnd**

Exercise 28. Linking tables

1. Link all the tables from the **Orders** table
2. Use the *Linked table Manager* to view the links

Exercise 29. Creating a Form

1. Create a columnar form based on the **Maker** table including all fields
2. Close and save the form as **Maker**
3. Open the **Maker** form and add a record
4. Create a columnar form based on the **Supplier** table including all fields
5. Close and save the form as **Supplier**
6. Use the **Supplier** form to add a record
7. Create a columnar form based on **Order**
8. Close and save the form

Exercise 30. Form views

1. Open the **Maker** form in *Design* view
2. Change to *Form* view without closing the form
3. Change to the *datasheet* view
4. Close the form
5. Open the **Supplier** table in *Form* view
6. Change to *Design* view without closing the form
7. Close the form

Exercise 31. Changing header, footer and detail area size for Forms

1. Open the **Supplier** table and increase the *detail* area size
2. Open the *Footer* area
3. Open the *Header* area
4. Close the *Header* and *Footer* areas

Exercise 32. Bound/Unbound Controls... and labels

1. Change the label for **Maker_name** in the **Maker** table to **Maker Name**
2. Delete the words **Maker_Name** in the control
3. Change to the *form* view and note that you cannot now see the Maker Name data (the control is *unbound*)
4. Change back to the *design* view and type **Maker Name** into the control
5. Change to the *form* view and note the error message! (there is no such field as **Maker Name**)
6. Type **Maker_Name** into the control and check that the data is shown correctly.

Exercise 33. Adding simple Controls in Forms

1. In the **OrderFrontEnd** database open the **Order** form in Design view.
2. Add another bound control for the **Supplier** field.
3. Add another bound control for the **Date** field.
4. Change the text in the label for the new **Date** control to **Date order placed**
5. Add an unbound field with the label **Type of Order**.
6. Change to the form view and test the controls you have added. Move from record to record and note that what you type in the *bound* control is specific to the record in which you type it, while data you type in the *unbound* control stays there regardless of the record you are viewing
7. Close and save the form

Exercise 34. Creating Single Option Box/ Check boxes in Forms

1. Open the **Order** table (note that the table is in the **Order** database!)
2. Add a new field called **Order completed?** with type **Yes/No**
3. Return to the **OrderFrontEnd** database, open the **Order** form and add a bound **Yes/No** control for **Order completed?**
4. Change to the *form* view and test the new control
5. Change the *default value* for **Order Complete?** To “yes”
6. Change to the *form* view and add a new record to test the default

Exercise 35. Changing controls in Forms

1. In the **Order** form remove the **Type of Order** control and the duplicate **Date** control.
2. Delete both **Supplier** controls
3. Close and save the form
4. Open the **Maker** form and change it so that it looks as below (Note labels)

Maker Name

web site

Contact name

Telephone number

5. Close and save the form
6. Open the **Supplier** form and make it look as shown right

Supplier_ID	1
Supplier_name	Alphabet Suppliers
County	Kent
Building_name	Unit 35
Road	Gleaming Forest Road
Town	Maidstone
PostCode	ME34 65KJ

7. Open the Order form and make it look as shown right:
(Note the size of fields and that **Order completed?** Is in the Form header area)

Exercise 36. Creating List boxes and Combo boxes in Forms

1. Open the **Order** form.
2. Add a combo box bound to the **Supplier_ID** field.
3. Add a list box bound to the **Supplier_ID** field.
4. Change to the *Form View* and test and compare the combo box and list box
5. Change back to *Design view*
6. Delete the *list box*
7. Close and save the form

Exercise 37. Editing Tab Order in Forms

1. Open the **Supplier** form and ensure the tab order is correct
2. Open the **Maker** form and ensure the tab order is correct
3. Open the **Order** form and ensure the tab order is correct

Exercise 38. Sub forms

Creating a form/subform for viewing Suppliers and the Products they supply.

1. Create a *tabular* form based on the **Product_Supplier** table.
2. Remove the **Supplier_ID** control and label, since this the field that is common between the **Supplier** form and the **Product_Supplier** form. The form should look as shown below:

Product ID	Price
P34, Propelling pencil, Parkei	£4.95
B14, Roller ball pen, Bic	£2.32
B32, Propelling pencil, Bic	£1.34
B14, Fibre tip pen, Berol	£2.67

3. Close and save the form as **Product_Supplier**
4. Open the **Supplier** form in *design view* and drag the **Product_Supplier** form onto it.
5. Change to *form view* to test the form. (Note that **Supplier_ID** is not visible anywhere on either form, but exists and is used to connect the relevant information from the two tables.)
6. Close and save the **Supplier** form

Creating a form/subform for viewing Orders and the “order lines”, that is the details of multiple products being ordered on each order.

7. Create a *tabular* form based on the **Order line** table.

Microsoft Access XP Beginners- Exercises

8. Remove the **Order No** control and label since this is the common field between the **Order** and the **Order line** tables. The form should look as follows:

Product ID	Quantity	Price
P34, Propelling pencil, Parki	2	£9.90
B32, Propelling pencil, Bic	2	£1.68
B14, Fibre tip pen, Berol	1	£2.67
P34, Propelling pencil, Parki	15	£74.25

9. Close and save the form as **Order line**
10. Open the **Order** form in *design* view and drag the **Order line** form onto it.
11. Change to *form* view to test the form.
12. Close and save the **Order** form
13. Creating a form/subform for viewing Makers and the Products they make.
14. Create a *tabular* form based on the **Product** table.
15. Remove the **Maker_ID** field (this is common between the **Maker** and **Product** tables) and the **Product_ID** field (used by Access, of no interest to us!). The form should look as shown right

Product Co	Description	RRP
P34	Propelling pencil	£5.00
B14	Roller ball pen	£2.50
B32	Propelling pencil	£1.35

16. Close and save the form as **Product**
17. Open the **Maker** form in *design* view and drag the **Product** form onto it.
18. Change to *form* view to test the form.
19. Close and save the **Maker** form

Exercise 39. Creating a simple select Query

- Use the database **OrderFrontEnd**
- We are aiming to create a query to show all products and their suppliers - create a new query and add the **Product** and **Supplier** tables. Is that all we need? Which other table is required and why????
- Add the fields **Product Code**, **Description**, **Supplier Name** and **Town**.

Exercise 40. Saving and changing views

- Change to the *datasheet* view (without closing the query!) and see the data.
- Close and save the query as **Qry_Product_Suppliers**
- Create a query using the **Maker**, **Product**, **Order** and **Order_line** tables. Include the fields **Maker_Name**, **Product_Code** and **Description**.
- Change to the *datasheet* view and see the data.
- Change back to the *design* view and add the **RRP**
- View the data.
- Close and save the query as **Qry_Products**

Exercise 41. Deleting tables from Queries (and why you might need to)

1. Open the **Products** table and note the *Crystal Ballpen* and *Matt Photo Paper* which exist in the table.
2. Open the **Qry_Products** Query and note that you cannot see any *Crystal Ballpen* and *Matt Photo Paper*. This Query is not giving a complete list of products!
3. Delete the **Order** and **Order line** tables from the Query (no fields from these have been used anyway!)
4. View the result of the query and note that *Crystal Ballpen* and *Matt Photo Paper* are now included in the list!
Note that because we had the **Order** and **Order_line** tables included in the query we were asking for data which existed in all tables. Since no *Crystal Ballpens* or *Matt Photo Paper* have been ordered they do not exist in those tables and are therefore not included in the query. Now that you have removed the Order tables you will list all products which exist in the **Product** table.
5. Remove all criteria
6. Close and save the Query

Exercise 42. Adding Criteria to a Query

1. Use **Qry_Product_Suppliers** to find Products supplied by **Mail Room Supplies** (check the results – there are 13)
2. Add criteria which find all *paper* supplied by **Mail Room Supplies** (check the results -3)
3. Find only products with *paper* at the beginning of the description (2)
4. Add criteria which find all *cases* supplied by **Goose and Hen Stationery** and all *photo* products supplied by **All Types of Paper**. Remember the dangers of AND and ALL (5)
5. Close and save the query
6. Create a query to find out which *Makers* the Supplier *Krazee Papers* deals with. (2!!!)
7. Close and save the query as **Supplier_Maker**.

Exercise 43. Editing a query

1. Open **Qry_Product_Suppliers**
2. Add the table **Maker**
3. Insert the field **Maker Name** to the left of **Description**.
4. Move **Product Code** after **Description**
5. Add the Supplier **County**
6. Delete **Town**
7. View the query
8. Remove all criteria
9. Save the query

Exercise 44. **Sorting Fields in a query and Showing fields**

1. Sort the data in **Qry_Product_Suppliers** by **Maker Name**
2. View the datasheet
3. Sort the data by **Supplier_Name**
4. View the datasheet
5. Sort the data by **Supplier_Name** and then by **Maker name**, but keep the fields *showing* in their existing order
6. Add a criterion which makes the query only deal with suppliers in **Notts**
7. View the results (17)
8. Hide the **County** field
9. View the results
10. Remove all criteria and show the **County** field again
11. Sort by **Supplier** and then by **Maker**
12. Add the **Supplier_ID** field
13. Close and save the query

Exercise 45. **Creating calculated fields in a query**

1. Create a query which shows orders sent to **Mudway Business Supplies**
2. Include fields for **Order_No, Supplier name, Date, Quantity and Price**
3. Create a field called **Cost** which calculates the total price for each orderline (i.e. **Quantity times Price**)
4. Create a field called **inc VAT** which adds 17.5% VAT onto the **Cost** (i.e. **Cost * 1.175**)
5. Change the query to show all orders
6. Save the Query as **Qry_Orders**

Exercise 46. **Formatting fields in a query**

1. Format the **inc VAT** field to show the £ sign and two decimal places
2. Format the **inc VAT** field to show the currency as **Kwacha**
3. Format the date field to show the month in full
4. Save and close the Query

Exercise 47. **Creating a report**

1. Create a Report based on **Qry_Product_Suppliers**
2. Change to *design* view
3. Change back to *preview* the report

Exercise 48. Saving, Changing Views and Printing Reports

1. Close and save the report as **Rpt_Product_Suppliers**
2. Create a report based on the **Products** query.
3. Close it and save it as **Rpt_Products**

Exercise 49. Changing a Report

1. Open the **Rpt_Product_Suppliers**
2. Remove the **Supplier_ID** field from the report
3. Make the **Page Header** area deeper
4. Change the **Product_Code** label in the **Page Header** area so that **Product** appears on the first line and **Code** beneath it and there is no – between.. (repeat for **Maker_Name** and **Supplier_Name**)

i.e.

<i>Product</i>	<i>Maker</i>	<i>Description</i>	<i>Supplier</i>	<i>County</i>
<i>Code</i>	<i>Name</i>		<i>name</i>	

5. Move the controls in the detail area to match the labels
6. Preview the report
7. Move the page number from the Page footer to the Page header, above the labels
8. Preview the Report

Exercise 50. Sorting and Grouping in Reports

1. Open the **Rpt_Product_Suppliers** Report
2. Move all controls out of the group header into the detail area
3. Change the Report so that it is grouped by **Maker Name**
4. Move the fields into the **Maker Name** header as appropriate
5. View the Report

Exercise 51. Creating Calculated fields and joining text fields

1. Create a Report based on **Qry_Orders**
2. Make sure it is grouped by **Order_No**
3. Make sure there is an **Order_No** footer
4. Add a control in the **Order_No** footer with the label **Order Total** which sums the **Cost** for each order
5. Add a control which *counts* the number of items in each order . Give it the label **No of Items**
6. Alter the **Supplier_name** control so that it shows the *Supplier Name* followed by a *comma* followed by the *County*

Exercise 52. Creating mailing labels

1. Create mailing labels for the suppliers using the **Supplier** table