

CGS 2545: Database Concepts Spring 2014

LAB #1

Includes Lab Assignment #1 – Due February 18th

Course Instructor : Dr. Mark Llewellyn
Lab Instructors : Arup Ghosh and Rui Hou

Department of Electrical Engineering and Computer Science
Computer Science Division
University of Central Florida



Lab #1

- The objective of this lab is to familiarize yourself with the basic workings of the Access DBMS.
- Step #1 – Download Northwind database from WebCourses. We'll be using this sample database for several labs. Save this database where you can easily get to it. I suggest putting it on a Flash drive.

NOTE: In the slides that follow, if the call-out symbol is outlined in red, it means that there is something for you to do or try, if the call-out is outlined in blue, I am simply giving you some information about what is displayed on that page. For the red call-outs on a given page, do them in numerical order.



Lab #1

- Step #2 – Start Access. There are a couple of different ways to do this depending on what you want to do during your session with the DBMS. If you are going to work exclusively with an already created database, it is easiest to just double-click on the database. Since that is what we are doing this time, just go to the location where you stored the Northwind database (the actual file name is: Northwind.accdb), and double-click on the file.
- Access will start and you should see the screen as shown on the next page. Page 5 shows the basic parts of the Access window.
- The second way to start Access is by clicking on the Start button, locating Access, start Access, then inside access click the File tab and select a database to open. We'll do this later.



Access

FILE HOME CREATE EXTERNAL DATA DATABASE TOOLS

View Paste Filter Sort & Filter Records Find Window

SECURITY WARNING Some active content has been disabled. Click for more details. Enable Content

All Acc... <<

Tables >>

- Categories
- Customers
- Employees
- Order Details
- Orders
- Products
- Shippers
- Suppliers

Queries >>>

Forms >>>

Reports >>>

Pages >>>

Macros >>>

Modules >>>

Main Switchboard

View Product and Order Information:

Categories Suppliers

Products Orders

Print Sales Reports

Display Database Window

Exit Microsoft Access

2. The main switchboard will appear. For now we'll make this disappear by clicking here. Now you should see the screen on the next page.

1. Access will display a "Security Warning - certain content in the database has been disabled". Simple click the "enable content" button.



Access

FILE HOME CREATE EXTERNAL DATA DATABASE TOOLS

View Paste Filter Sort & Filter Records Find Window Text Formatting

Ascending Descending Remove Sort Refresh All Find Size to Fit Form Switch Windows

B I U A

All Access O...

Tables

- Categories
- Customers
- Employees
- Order Details
- Orders
- Products
- Shippers
- Suppliers

Queries

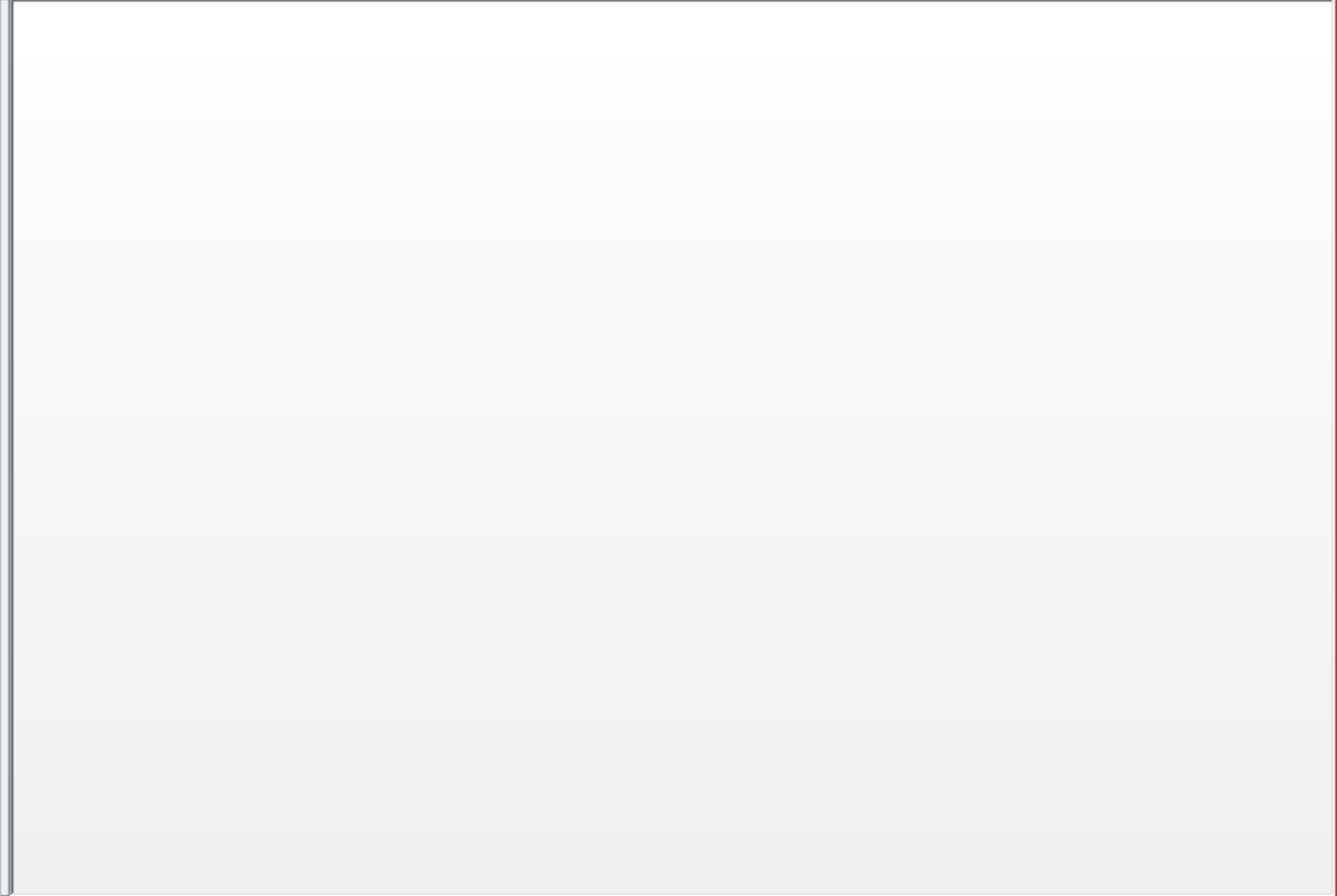
Forms

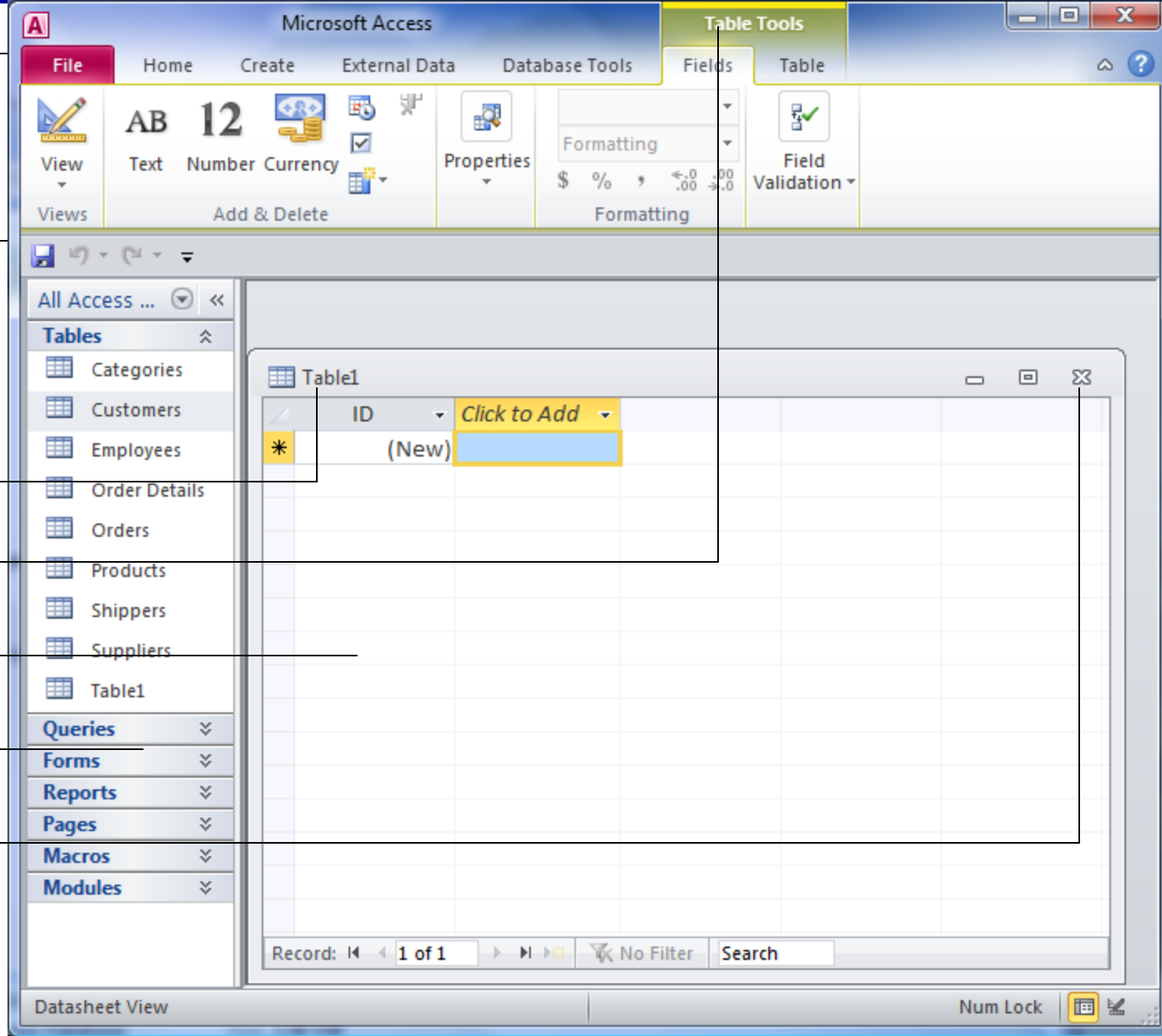
Reports

Pages

Macros

Modules





Ribbon with command groups arranged on tabs

Object tab

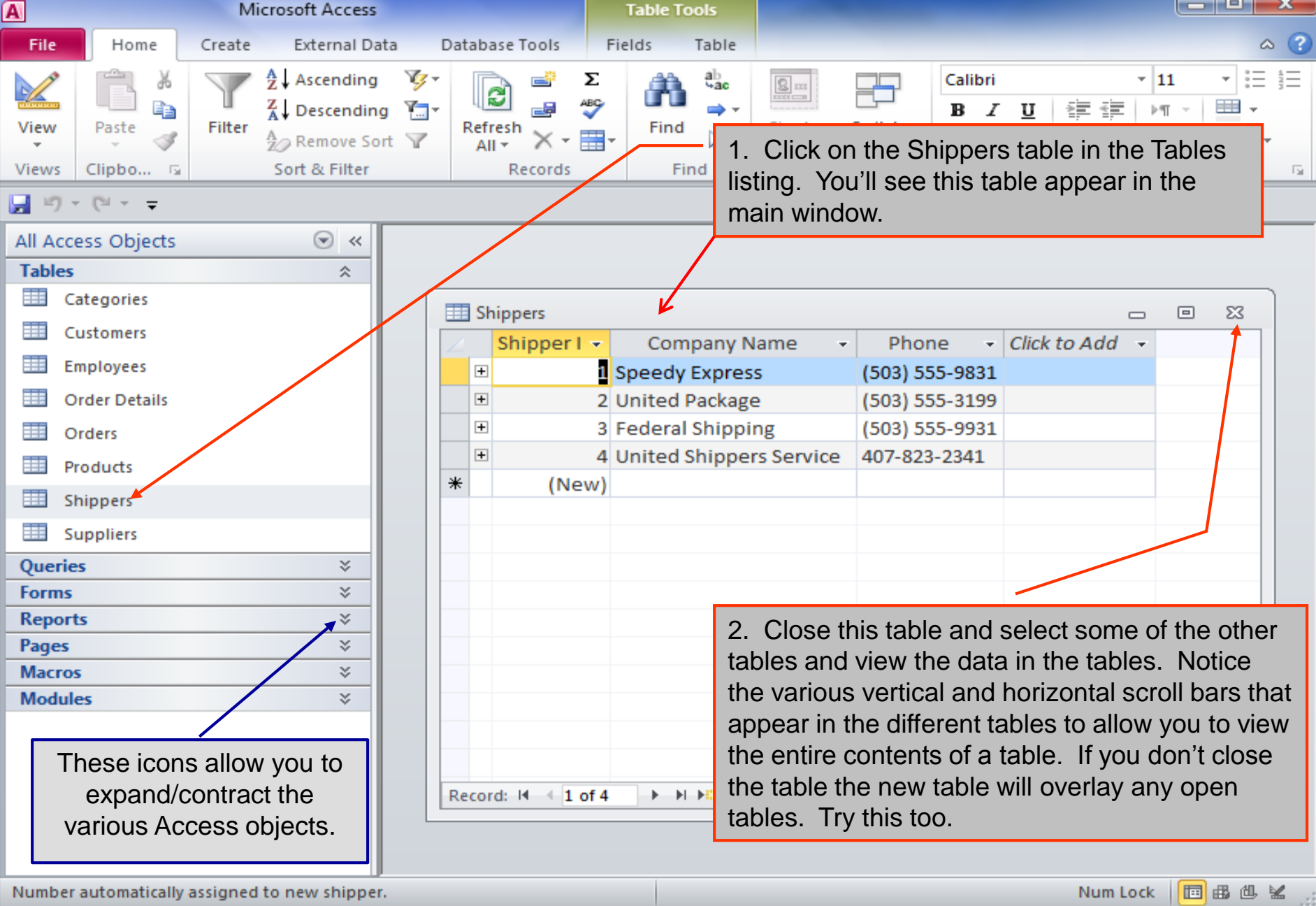
Table Tools active now

Object window

Navigation Pane

Object window Close button





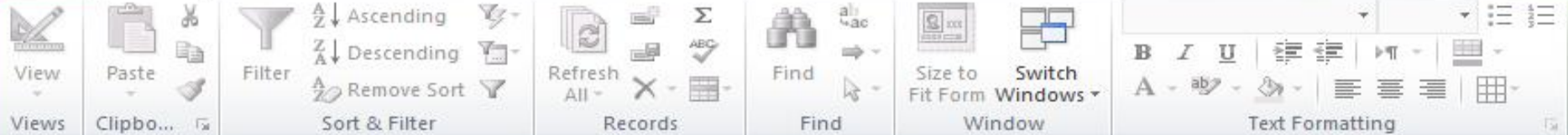
1. Click on the Shippers table in the Tables listing. You'll see this table appear in the main window.

These icons allow you to expand/contract the various Access objects.

2. Close this table and select some of the other tables and view the data in the tables. Notice the various vertical and horizontal scroll bars that appear in the different tables to allow you to view the entire contents of a table. If you don't close the table the new table will overlay any open tables. Try this too.

Shipper I	Company Name	Phone	Click to Add
1	Speedy Express	(503) 555-9831	
2	United Package	(503) 555-3199	
3	Federal Shipping	(503) 555-9931	
4	United Shippers Service	407-823-2341	
*	(New)		





All Access Objects

Orders
Orders Subform
Product List
Products
Quarterly Orders
Quarterly Orders Subform
Sales Analysis
Sales Analysis Subform1
Sales Analysis Subform2
Sales by Year Dialog
Sales Reports Dialog
Shippers
Shippers1
Startup
Suppliers

1. Contract the Tables objects and expand the Forms objects. Then scroll down this listing to the very last entry which is the Suppliers.
2. Double-click the Suppliers listing.

Reports

Pages

Macros

Modules

Ready

Num Lock



Access

FILE HOME CREATE EXTERNAL DATA DATABASE TOOLS

View Paste Filter Ascending Descending Remove Sort Refresh All Find Find Size to Fit Form Windows Switch Window

This is a Form. It allows you to see the data in the Suppliers table in a non-tabular format as well as add new entries to the database and to quickly review the products offered by this supplier. The review button runs the query while the add button runs the insert.

- All Access Objects
- Customer Orders S...
 - Customer Phone List
 - Customers
 - Employees
 - Main Switchboard
 - Orders
 - Orders Subform
 - Product List
 - Products
 - Quarterly Orders
 - Quarterly Orders Su...
 - Sales Analysis
 - Sales Analysis Subf...
 - Sales Analysis Subf...
 - Sales by Year Dialog
 - Sales Reports Dialog
 - Shippers
 - Shippers1
 - Startup
 - Suppliers
- Reports Pages Macros Modules

Suppliers

Supplier ID: 1

Company Name: Exotic Liquids

Contact Name: Charlotte Cooper Title: Purchasing Manager

Address: 49 Gilbert St.

City: London Region:

Postal Code: EC1 4SD Country: UK

Phone: (171) 555-2222 Fax:

Home Page:

Review Products Add Products

Record: 1 No Filter Search

These buttons and indicators allow you to move through the different suppliers. There are 29 of them currently in the database.



Access

FILE HOME CREATE EXTERNAL DATA DATABASE TOOLS

View Paste Filter Sort & Filter Records Find Window

Ascending Descending Remove Sort Refresh All Find Size to Fit Form Windows Switch Windows

Sign in

This is the pop-up window that appears when the "Review Products" button on the form is clicked.

- All Access Objects
- Customer Orders S...
 - Customer Phone List
 - Customers
 - Employees
 - Main Switchbo...
 - Orders
 - Orders Subform
 - Product List
 - Products
 - Quarterly Order
 - Quarterly Order
 - Sales Analysis
 - Sales Analysis S
 - Sales Analysis S
 - Sales by Year Di
 - Sales Reports D...
 - Shippers
 - Shippers1
 - Startup
 - Suppliers
- Reports Pages Macros Modules

Product List

Product Name:	Aniseed Syrup	<input type="checkbox"/> Discontinued
Quantity Per Unit:	12 - 550 ml bottles	Unit Price: \$10.00
Product Name:	Chai	<input type="checkbox"/> Discontinued
Quantity Per Unit:	10 boxes x 20 bags	Unit Price: \$18.00
Product Name:	Chang	<input type="checkbox"/> Discontinued
Quantity Per Unit:	24 - 12 oz bottles	Unit Price: \$19.00

Product List (Background)

Purchasing Manager

Products



This form appears when you click the "Add Products" button on the form. Add a new product by filling in the fields in this form. Then save your new entry by clicking the Save icon.

- All Access Objects
- Customer Orders Summary
- Customer Phone List
- Customers
- Employees
- Main Switchboard
- Orders
- Orders Subform
- Product List
- Products
- Quarterly Orders
- Quarterly Orders Summary
- Sales Analysis
- Sales Analysis Subform
- Sales Analysis Subform
- Sales by Year Dialog
- Sales Reports Dialog
- Shippers
- Shippers1
- Startup
- Suppliers
- Reports
- Pages
- Macros
- Modules

Products

Preview product list

Output product list as HTML

Product ID: (New)

Product Name:

Supplier:

Category:

Quantity Per Unit:

Unit Price: \$0.00

Units In Stock: 0

Units On Order: 0

Reorder Level: 0

Discontinued:

Record: 1 of 1 No Filter Search



Access

FILE HOME CREATE EXTERNAL DATA DATABASE TOOLS

View Paste Filter Ascending Descending Remove Sort Refresh All Find Size to Fit Form Windows Switch Windows Text Formatting

- All Access Objects
- Customer Orders S...
 - Customer Phone List
 - Customers
 - Employees
 - Main Switchboard
 - Orders
 - Orders Subform
 - Product List
 - Products
 - Quarterly Orders
 - Quarterly Orders Su...
 - Sales Analysis
 - Sales Analysis Subf...
 - Sales Analysis Subf...
 - Sales by Year Dialog
 - Sales Reports Dialog
 - Shippers
 - Shippers1
 - Startup
 - Suppliers
 - Reports
 - Pages
 - Macros
 - Modules

Products

Preview product list

Output product list as HTML

Products

Product ID: 82

Product Name: canned tuna fish

Supplier: Exotic Liquids

Category: Seafood

Quantity Per Unit: 45

Unit Price: \$2.39

Units In Stock: 400

Units On Order: 2000

Reorder Level: 250

Discontinued:

Record: 1 of 1 No Filter Search



Go back to the form and once again select "Review Products" and you'll now see the newly added item in this suppliers list of products. You've just performed a database table insertion.

Product Name	Quantity Per Unit	Unit Price	Discontinued
Aniseed Syrup	12 - 550 ml bottles	\$10.00	<input type="checkbox"/>
canned tuna fish	45	\$2.39	<input type="checkbox"/>
Chai	10 boxes x 20 bags	\$18.00	<input type="checkbox"/>
Chang	24 - 12 oz bottles	\$19.00	<input type="checkbox"/>

Supplier Form Fields:

- Title: Purchasing Manager
- Region: []
- Country: UK
- Phone: (171) 555-2222
- Fax: []
- Home Page: []
- Buttons: Review Products, Add Products

- Orders
- Orders Subform
- Product List
- Products
- Quarterly Orders
- Quarterly Orders Su...
- Sales Analysis
- Sales Analysis Subf...
- Sales Analysis Subf...
- Sales by Year Dialog
- Sales Reports Dialog
- Shippers



Access

FILE HOME CREATE EXTERNAL DATA DATABASE TOOLS

View Paste Filter Sort & Filter Records

Ascending Descending Remove Sort

Refresh All

TABLE TOOLS

Play around a bit with the left pane and eventually double-click on the Suppliers listing in the Tables menu. Compare this view of the Suppliers table with the view from the previous page.

All Access Objects

Tables

- Categories
- Customers
- Employees
- Order Details
- Orders
- Products
- Shippers
- Suppliers**

Queries

Forms

Reports

Pages

Macros

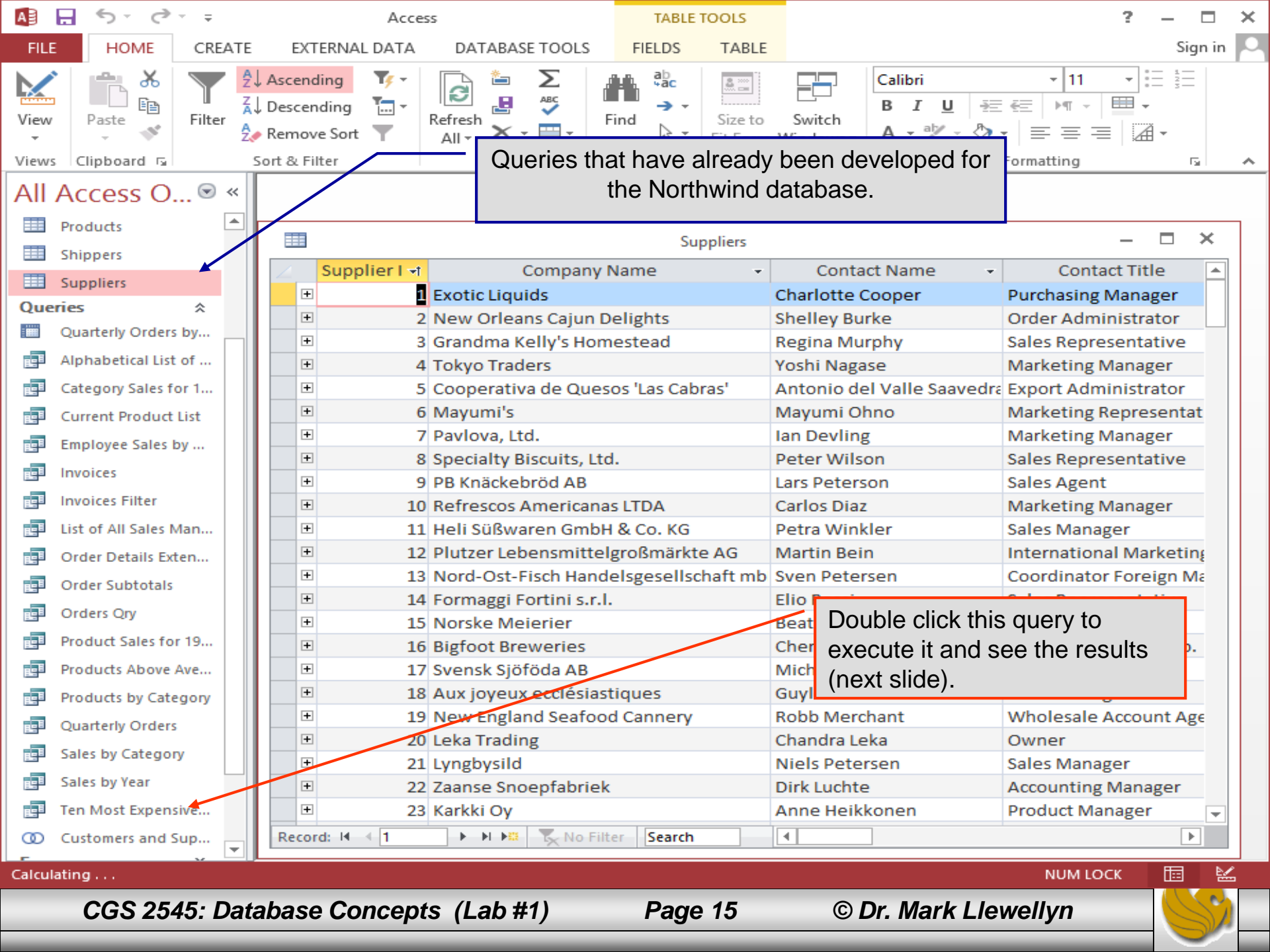
Modules

All tables in the Northwind database

Suppliers

Supplier I	Contact Name	Contact Title
1 Exotic Liquids	Charlotte Cooper	Purchasing Manager
2 New Orleans Cajun Delights	Shelley Burke	Order Administrator
3 Grandma Kelly's Homestead	Regina Murphy	Sales Representative
4 Tokyo Traders	Yoshi Nagase	Marketing Manager
5 Cooperativa de Quesos 'Las Cabras'	Antonio del Valle Saavedra	Export Administrator
6 Mayumi's	Mayumi Ohno	Marketing Representat
7 Pavlova, Ltd.	Ian Devling	Marketing Manager
8 Specialty Biscuits, Ltd.	Peter Wilson	Sales Representative
9 PB Knäckebröd AB	Lars Peterson	Sales Agent
10 Refrescos Americanas LTDA	Carlos Diaz	Marketing Manager
11 Heli Süßwaren GmbH & Co. KG	Petra Winkler	Sales Manager
12 Plutzer Lebensmittelgroßmärkte AG	Martin Bein	International Marketing
13 Nord-Ost-Fisch Handelsgesellschaft mb	Sven Petersen	Coordinator Foreign Ma
14 Formaggi Fortini s.r.l.	Elio Rossi	Sales Representative
15 Norske Meierier	Beate Vileid	Marketing Manager
16 Bigfoot Breweries	Cheryl Saylor	Regional Account Rep.
17 Svensk Sjöföda AB	Michael Björn	Sales Representative
18 Aux joyeux ecclésiastiques	Guyène Nodier	Sales Manager
19 New England Seafood Cannery	Robb Merchant	Wholesale Account Age
20 Leka Trading	Chandra Leka	Owner
21 Lyngbysild	Niels Petersen	Sales Manager
22 Zaanse Snoepfabriek	Dirk Luchte	Accounting Manager
23 Karkki Oy	Anne Heikkonen	Product Manager

Record: 1 No Filter Search



Queries that have already been developed for the Northwind database.

Double click this query to execute it and see the results (next slide).

Supplier I	Company Name	Contact Name	Contact Title
1	Exotic Liquids	Charlotte Cooper	Purchasing Manager
2	New Orleans Cajun Delights	Shelley Burke	Order Administrator
3	Grandma Kelly's Homestead	Regina Murphy	Sales Representative
4	Tokyo Traders	Yoshi Nagase	Marketing Manager
5	Cooperativa de Quesos 'Las Cabras'	Antonio del Valle Saavedra	Export Administrator
6	Mayumi's	Mayumi Ohno	Marketing Representat
7	Pavlova, Ltd.	Ian Devling	Marketing Manager
8	Specialty Biscuits, Ltd.	Peter Wilson	Sales Representative
9	PB Knäckebröd AB	Lars Peterson	Sales Agent
10	Refrescos Americanas LTDA	Carlos Diaz	Marketing Manager
11	Heli Süßwaren GmbH & Co. KG	Petra Winkler	Sales Manager
12	Plutzer Lebensmittelgroßmärkte AG	Martin Bein	International Marketing
13	Nord-Ost-Fisch Handelsgesellschaft mb	Sven Petersen	Coordinator Foreign Ma
14	Formaggi Fortini s.r.l.	Elio	
15	Norske Meierier	Beat	
16	Bigfoot Breweries	Cher	
17	Svensk Sjöföda AB	Mich	
18	Aux joyeux ecclésiastiques	Guy	
19	New England Seafood Cannery	Robb Merchant	Wholesale Account Age
20	Leka Trading	Chandra Leka	Owner
21	Lyngbysild	Niels Petersen	Sales Manager
22	Zaanse Snoepfabriek	Dirk Luchte	Accounting Manager
23	Karkki Oy	Anne Heikkonen	Product Manager



Access

FILE HOME CREATE EXTERNAL DATA DATABASE TOOLS Sign in

View Paste Filter Ascending Descending Remove Sort Refresh All Find Find Size to Fit Form Switch Windows Text Formatting

- All Access Objects
- Products
 - Shippers
 - Suppliers
 - Queries
 - Quarterly Orders by...
 - Alphabetical List of ...
 - Category Sales for 1...
 - Current Product List
 - Employee Sales by ...
 - Invoices
 - Invoices Filter
 - List of All Sales Man...
 - Order Details Exten...
 - Order Subtotals
 - Orders Qty
 - Product Sales for 19...
 - Products Above Ave...
 - Products by Category
 - Quarterly Orders
 - Sales by Category
 - Sales by Year
 - Ten Most Expensive...
 - Customers and Sup...

Ten Most Expensive Products

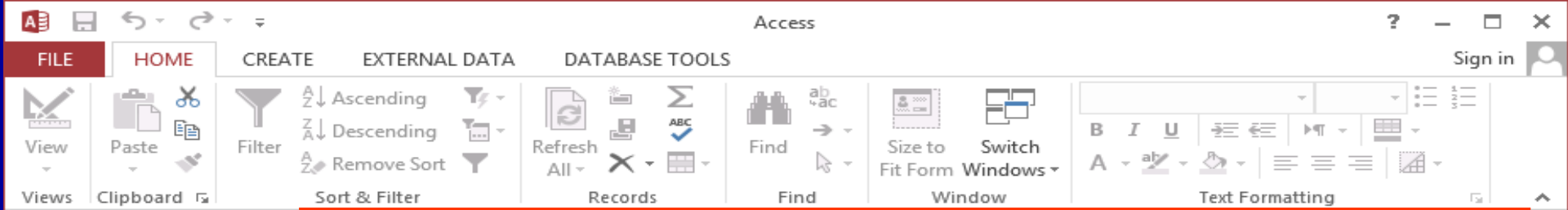
Ten Most Expensive Product	Unit Price
Côte de Blaye	\$263.50
Thüringer Rostbratwurst	\$123.79
Mishi Kobe Niku	\$97.00
Sir Rodney's Marmalade	\$81.00
Carnarvon Tigers	\$62.50
Raclette Courdavault	\$55.00
Manjimup Dried Apples	\$53.00
Tarte au sucre	\$49.30
Ipoh Coffee	\$46.00
Rössle Sauerkraut	\$45.60
*	\$0.00

Record: 1 of 10 No Filter Search

Contact Title
Purchasing Manager
Order Administrator
Sales Representative
Marketing Manager
Export Administrator
Marketing Representat
Marketing Manager
Sales Representative
Sales Agent
Marketing Manager
Sales Manager
International Marketing
Coordinator Foreign Ma
Sales Representative
Marketing Manager
Regional Account Rep.
Sales Representative

The 10 most expensive products currently in the database.





The forms that have been previously defined for the Northwind db. Notice the Main Switchboard form. If you double click this form, you'll see it reappear on your screen like before.

- All Access Objects
- Ten Most Expensive...
- Customers and Sup...
- Forms**
- Categories
- Customer Labels Di...
- Customer Orders
- Customer Orders S...
- Customer Orders S...
- Customer Phone List
- Customers
- Employees
- Main Switchboard
- Orders
- Orders Subform
- Product List
- Products
- Quarterly Orders
- Quarterly Orders Su...
- Sales Analysis
- Sales Analysis Subf...
- Sales Analysis Subf...
- Sales by Year Dialog
- Sales Reports Dialog

Look at some of these forms to get an idea of some of the capabilities of Access in this area.

Notice how the data looks different in the queries compared to the forms. A query is basically returning "raw" data with no nice format while a form tends be able to combine different types of data and present it in a more "user-friendly" format.



View Paste Filter Ascending Descending Remove Sort Refresh All

Views Clipboard Sort & Filter Records

Sometimes it is desirable to be able to switch between a form view of data and a query view of data (also referred to as the datasheet view). To do this you need to change your view using the view button located here.

- Ten Most Expensive...
- Customers and Sup...
- Forms**
 - Categories
 - Customer Labels Di...
 - Customer Orders
 - Customer Orders S...
 - Customer Orders S...
 - Customer Phone List
 - Customers
 - Employees
 - Main Switchboard
 - Orders**
 - Orders Subform
 - Product List
 - Products
 - Quarterly Orders
 - Quarterly Orders Su...
 - Sales Analysis
 - Sales Analysis Subf...
 - Sales Analysis Subf...
 - Sales by Year Dialog
 - Sales Reports Dialog

Bill To: Alfreds Futterkiste Ship To: Alfreds Futterkiste

Obere Str. 57 Obere Str. 57

Berlin 12209 Berlin 12209

Germany Germany

Salesperson: Peacock, Margaret Ship Via: Speedy United Federal

Order ID: 10692 Order Date: 03-Oct-1997 Required Date: 31-Oct-1997 Shipped Date: 13-Oct-1997

Product	Unit Price	Quantity	Discount	Extended Price
Vegie-spread	\$43.90	20	0%	\$878.00
*			0%	

Print Invoice

Subtotal: \$61.02
Freight: \$61.02
Total: \$61.02

Record: 1 No Filter Search



Optional views within Access. Select the Datasheet view to see the “raw” data in this form. Next slide shows the datasheet form of this data.

View

Paste

Filter

Sort & Filter

Ascending

Descending

Remove Sort

Form View

Datasheet View

Design View

Customer Labels Di...

Customer Orders

Customer Orders S...

Customer Orders S...

Customer Phone List

Customers

Employees

Main Switchboard

Orders

Orders Subform

Product List

Products

Quarterly Orders

Quarterly Orders Su...

Sales Analysis

Sales Analysis Subf...

Sales Analysis Subf...

Sales by Year Dialog

Sales Reports Dialog

Orders

Bill To: Alfreds Futterkiste
 Obere Str. 57
 Berlin 12209
 Germany

Ship To: Alfreds Futterkiste
 Obere Str. 57
 Berlin 12209
 Germany

Salesperson: Peacock, Margaret

Ship Via: Speedy United Federal

Order ID: 10692 **Order Date:** 03-Oct-1997 **Required Date:** 31-Oct-1997 **Shipped Date:** 13-Oct-1997

Product	Unit Price	Quantity	Discount	Extended Price
Vegie-spread	\$43.90	20	0%	\$878.00
*			0%	

Subtotal: \$61.02
Freight: \$61.02
Total: \$61.02

Print Invoice

Record: 1 No Filter Search



Access FORM TOOLS DATASHEET

FILE HOME CREATE EXTERNAL DATA DATABASE TOOLS DATASHEET

View Themes Colors Add Existing Fields Property Sheet Background Color Alternate Row Color Conditional Formatting

Views Themes Tools Formatting

All Access O... <<

Ten Most Expensive... Customers and Sup...

Forms

- Categories
- Customer Labels Di...
- Customer Orders
- Customer Orders S...
- Customer Orders S...
- Customer Phone List
- Customers
- Employees
- Main Switchboard
- Orders
- Orders Subform
- Product List
- Products
- Quarterly Orders
- Quarterly Orders Su...
- Sales Analysis
- Sales Analysis Subf...
- Sales Analysis Subf...
- Sales by Year Dialog
- Sales Reports Dialog

Orders

Bill To	Ship To	ShipAddress	ShipCity	ShipRegion	ShipPostalCt	ShipCou
Alfreds Futterk...	Alfreds Futterki...	Obere Str. 57	Berlin		12209	Germany
Alfreds Futterki...	Alfreds Futterki...	Obere Str. 57	Berlin		12209	Germany
Alfreds Futterki...	Alfreds Futterki...	Obere Str. 57	Berlin		12209	Germany
Alfreds Futterki...	Alfreds Futterki...	Obere Str. 57	Berlin		12209	Germany
Alfreds Futterki...	Alfreds Futterki...	Obere Str. 57	Berlin		12209	Germany
Ana Trujillo Em...	Ana Trujillo Em...	Avda. de la Con	México D.F.		05021	Mexico
Ana Trujillo Em...	Ana Trujillo Em...	Avda. de la Con	México D.F.		05021	Mexico
Ana Trujillo Em...	Ana Trujillo Em...	Avda. de la Con	México D.F.		05021	Mexico
Ana Trujillo Em...	Ana Trujillo Em...	Avda. de la Con	México D.F.		05021	Mexico
Antonio Moreno	Antonio Moreno	Mataderos 231.	México D.F.		05023	Mexico
Antonio Moreno	Antonio Moreno	Mataderos 231.	México D.F.		05023	Mexico
Antonio Moreno	Antonio Moreno	Mataderos 231.	México D.F.		05023	Mexico
Antonio Moreno	Antonio Moreno	Mataderos 231.	México D.F.		05023	Mexico
Antonio Moreno	Antonio Moreno	Mataderos 231.	México D.F.		05023	Mexico
Antonio Moreno	Antonio Moreno	Mataderos 231.	México D.F.		05023	Mexico
Antonio Moreno	Antonio Moreno	Mataderos 231.	México D.F.		05023	Mexico
Around the Horr	Around the Horr	Brook Farm	Colchester	Essex	CO7 6JX	UK
Around the Horr	Around the Horr	Brook Farm	Colchester	Essex	CO7 6JX	UK
Around the Horr	Around the Horr	Brook Farm	Colchester	Essex	CO7 6JX	UK

Switch between the various Tables, Queries, Forms, and Reports and select from the various different views that are available and see some more of the features of Access. Note particularly, that the Design view gives you the ability to see more specific details of each table, query, or form. The next couple of slides show some of these.



- All Access O...
- Tables**
- Categories
 - Customers
 - Employees
 - Order Details
 - Orders
 - Products**
 - Shippers
 - Suppliers
- Queries**
- Quarterly Orders by...
 - Alphabetical List of ...
 - Category Sales for 1...
 - Current Product List
 - Employee Sales by ...
 - Invoices
 - Invoices Filter
 - List of All Sales Man...
 - Order Details Exten...
 - Order Subtotals
 - Orders Qry
 - Product Sales for 19...
 - Products Above Ave...
 - Products by Category

Field Name	Data Type	Description (Optional)
ProductID	AutoNumber	Number automatically assigned to new product.
ProductName	Short Text	
SupplierID	Number	Same entry as in Suppliers table.
CategoryID	Number	Same entry as in Categories table.
QuantityPerUnit	Short Text	(e.g., 24-count case, 1-liter bottle).
UnitPrice	Currency	
UnitsInStock	Number	
UnitsOnOrder	Number	
ReorderLevel	Number	Minimum units to maintain in stock.
Discontinued	Yes/No	Yes means item is no longer available.

Field Properties

General	
Field Size	Long Integer
New Values	Increment
Format	
Caption	Product ID
Indexed	Yes (No Duplicates)
Text Align	General

A field name can be up to 64 characters long, including spaces. Press F1 for help on field names.

This is the Design view of the Products table. Notice how the key attribute is defined as well as some of the features that apply to each attribute.



Access QUERY TOOLS

FILE HOME CREATE EXTERNAL DATA DATABASE TOOLS DESIGN

View Run Select Make Table Append Update Crosstab Delete Union Pass-Through Data Definition Show Table Insert Rows Delete Rows Builder Insert Columns Delete Columns Return: [] Totals Parameters Property Sheet Table Names

Results Query Type Query Setup Show/Hide

All Access O...

Tables

- Categories
- Customers
- Employees
- Order Details
- Orders
- Products
- Shippers
- Suppliers

Queries

- Quarterly Orders by...
- Alphabetical List of ...
- Category Sales for 1...
- Current Product List
- Employee Sales by ...
- Invoices**
- Invoices Filter
- List of All Sales Man...
- Order Details Exten...
- Order Subtotals
- Orders Qry
- Product Sales for 19...
- Products Above Ave...
- Products by Category

```

SELECT Orders.ShipName, Orders.ShipAddress, Orders.ShipCity,
Orders.ShipRegion, Orders.ShipPostalCode, Orders.ShipCountry,
Orders.CustomerID, Customers.CompanyName, Customers.Address,
Customers.City, Customers.Region, Customers.PostalCode,
Customers.Country, [FirstName] & " " & [LastName] AS Salesperson,
Orders.OrderID, Orders.OrderDate, Orders.RequiredDate,
Orders.ShippedDate, Shippers.CompanyName, [Order Details].ProductID,
Products.ProductName, [Order Details].UnitPrice, [Order Details].Quantity,
[Order Details].Discount, CCur([Order Details].UnitPrice*[Quantity]*(1-
[Discount])/100)*100 AS ExtendedPrice, Orders.Freight
FROM Shippers INNER JOIN (Products INNER JOIN ((Employees INNER JOIN
(Customers INNER JOIN Orders ON
Customers.CustomerID=Orders.CustomerID) ON
Employees.EmployeeID=Orders.EmployeeID) INNER JOIN [Order Details] ON
Orders.OrderID=[Order Details].OrderID) ON Products.ProductID=[Order
Details].ProductID) ON Shippers.ShipperID=Orders.ShipVia;

```

This is the SQL view of the Query named: Invoices. Notice that depending on whether you are in the Tables, Queries, Forms, etc. that the types of views you have will change correspondingly. For example, there is no SQL view when looking at a Form.



Assessment Point #1

- At this point you have examined a few relations (tables), queries, and forms in the sample database and have navigated through several features of Access.
- If you are still uncertain as to how to move about between tables, forms, reports, or within a table then repeat the steps above until you understand what to do. Don't hesitate to ask the lab instructor for some assistance.
- If you've done ok so far we'll go on at this point and begin to enter some of our own data into the *customers* relation. There are several ways to do this, but we'll stick to the simple ways for right now.
- Select the Products table from the Tables listing. From the Home tab click the New Record icon (see next page).



Access **TABLE TOOLS** FILE HOME CREATE EXTERNAL DATA DATABASE TOOLS FIELDS TABLE Sign in

View Paste Filter Ascending Descending Remove Sort Refresh All Find Find Size to Fit Form Windows Switch Window Calibri 11 B I U Text Formatting

All Access Objects

Tables

- Categories
- Customers
- Employees
- Order Details
- Orders
- Products**
- Shippers
- Suppliers

Queries

Forms

- Categories
- Customer Labels Di...
- Customer Orders
- Customer Orders S...
- Customer Orders S...
- Customer Phone List
- Customers
- Employees
- Main Switchboard
- Orders
- Orders Subform
- Product List
- Products

Products

Product ID	Product Name	Supplier
1	Chai	Exotic Liquids
2	Chang	Exotic Liquids
3	Aniseed Syrup	Exotic Liquids
4	Chef Anton's Cajun Seasoning	New Orleans Cajun Delights
5	Chef Anton's Gumbo Mix	New Orleans Cajun Delights
6	Grandma's Boysenberry Spread	Grandma Kelly's Homestead
7	Uncle Bob's Organic Dried Pears	Grandma Kelly's Homestead
8	Northwoods Cranberry Sauce	Grandma Kelly's Homestead
9	Mishi Kobe Niku	Tokyo Traders
10	Ikura	Tokyo Traders
11	Queso Cabrales	Cooperativa de Quesos 'Las Cabras'
12	Queso Manchego La Pastora	Cooperativa de Quesos 'Las Cabras'
13	Konbu	Mayumi's
14	Tofu	Mayumi's
15	Genen Shouyu	Mayumi's
16	Pavlova	Pavlova, Ltd.
17	Alice Mutton	Pavlova, Ltd.
18	Carnarvon Tigers	Pavlova, Ltd.
19	Teatime Chocolate Biscuits	Specialty Biscuits, Ltd.
20	Sir Rodney's Marmalade	Specialty Biscuits, Ltd.
21	Sir Rodney's Scones	Specialty Biscuits, Ltd.
22	Gustaf's Knäckebröd	PB Knäckebröd AB
23	Tunnbröd	PB Knäckebröd AB

Record: 1 No Filter Search

1. Click New Record and add a new row to the Products table.



View Paste Filter Ascending Descending Remove Sort Sort & Filter Refresh All

1. Notice that Access has placed you at the end of the table on a blank row. You are now ready to insert data into this table.

2. Enter "Hot Dog" in the Product Name column and press the tab key to move to the Supplier column.

All Access Objects

Tables: Categories, Customers, Employees, Order Details, Orders, **Products**, Shippers, Suppliers

Queries

Forms: Categories, Customer Labels Di..., Customer Orders, Customer Orders S..., Customer Orders S..., Customer Phone List, Customers, Employees, Main Switchboard, Orders, Orders Subform, Product List, Products

Product ID	Product Name	Supplier	Category
58	Escargots de Bourgogne	Escargots Nouveaux	Seafood
59	Raclette Courdavault	Gai pâturage	Dairy Products
60	Camembert Pierrot	Gai pâturage	Dairy Products
61	Sirop d'érable	Forêts d'érables	Condiments
62	Tarte au sucre	Forêts d'érables	Confections
63	Vegie-spread	Pavlova, Ltd.	Condiments
64	Wimmers gute Semmelknödel	Plutzer Lebensmittelgroßmärkte AG	Grains/Cereals
65	Louisiana Fiery Hot Pepper Sauce	New Orleans Cajun Delights	Condiments
66	Louisiana Hot Spiced Okra	New Orleans Cajun Delights	Condiments
67	Laughing Lumberjack Lager	Bigfoot Breweries	Beverages
68	Scottish Longbreads	Specialty Biscuits, Ltd.	Confections
69	Gudbrandsdalsost	Norske Meierier	Dairy Products
70	Outback Lager	Pavlova, Ltd.	Beverages
71	Fløtemysost	Norske Meierier	Dairy Products
72	Mozzarella di Giovanni	Formaggi Fortini s.r.l.	Dairy Products
73	Röd Kaviar	Svensk Sjöföda AB	Seafood
74	Longlife Tofu	Tokyo Traders	Produce
75	Rhönbräu Klosterbier	Plutzer Lebensmittelgroßmärkte AG	Beverages
76	Lakkalikööri	Karkki Oy	Beverages
77	Original Frankfurter grüne Soße	Plutzer Lebensmittelgroßmärkte AG	Condiments
81	Hot Dog	Escargots Nouveaux	
82	canned tuna fish	Exotic Liquids	Seafood
*	(New)		

Record: 14 of 80 of 80 No Filter Search



Access **TABLE TOOLS**

FILE HOME CREATE EXTERNAL DATA DATABASE TOOLS FIELDS TABLE

View Paste Filter Ascending Descending Remove Sort Refresh All Find Find Size to Fit Form Windows Switch Window

Calibri 11 B I U Text Formatting

All Access Objects

Tables

- Categories
- Customers
- Employees
- Order Details
- Orders
- Products
- Shippers
- Suppliers

Queries

Forms

- Categories
- Customer Labels Di...
- Customer Orders
- Customer Orders S...
- Customer Orders S...
- Customer Phone List
- Customers
- Employees
- Main Switchboard
- Orders
- Orders Subform
- Product List
- Products

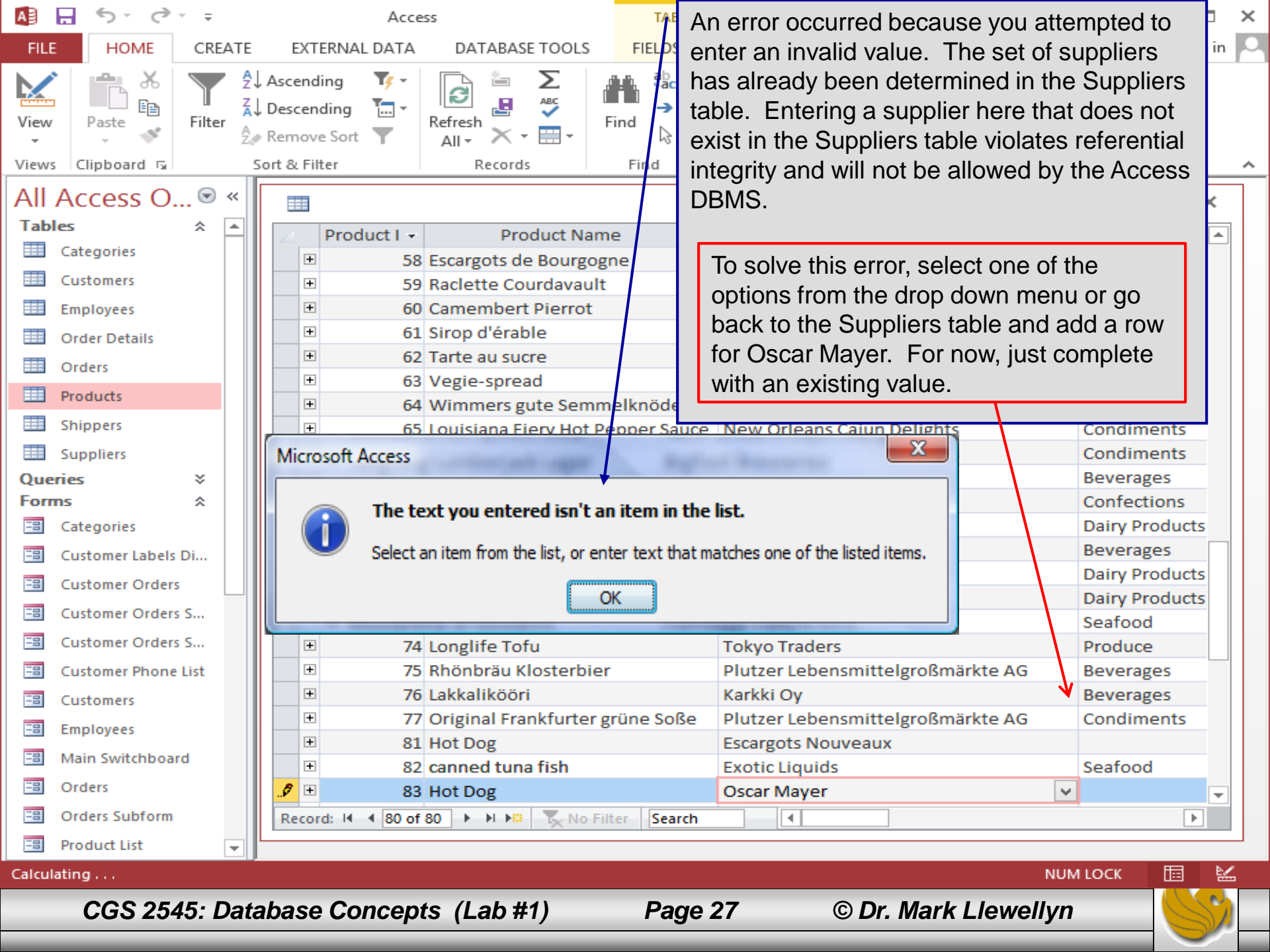
Products

Product ID	Product Name	Supplier	Category
58	Escargots de Bourgogne	Escargots Nouveaux	Seafood
59	Raclette Courdavault	Gai pâturage	
60	Camembert Pierrot	Gai pâturage	
61	Sirop d'érable	Forêts d'érables	
62	Tarte au sucre	Forêts d'érables	
63	Vegie-spread	Pavlova, Ltd.	
64	Wimmers gute Semmelknödel	Plutzer Lebensmittel	
65	Louisiana Fiery Hot Pepper Sauce	New Orleans Cajun	
66	Louisiana Hot Spiced Okra	New Orleans Cajun	
67	Laughing Lumberjack Lager	Bigfoot Breweries	
68	Scottish Longbreads	Specialty Biscuits	
69	Gudbrandsdalsost	Norske Meierier	Dairy Products
70	Outback Lager	Pavlova, Ltd.	Beverages
71	Fløtemysost	Norske Meierier	Dairy Products
72	Mozzarella di Giovanni	Formaggi Fortini s.r.l.	Dairy Products
73	Röd Kaviar	Svensk Sjöföda AB	Seafood
74	Longlife Tofu	Tokyo Traders	Produce
75	Rhönbräu Klosterbier	Plutzer Lebensmittelgroßmärkte AG	Beverages
76	Lakkalikööri	Karkki Oy	Beverages
77	Original Frankfurter grüne Soße	Plutzer Lebensmittelgroßmärkte AG	Condiments
81	Hot Dog	Escargots Nouveaux	
82	canned tuna fish	Exotic Liquids	Seafood
83	Hot Dog		

Record: 14 of 80 of 80 No Filter Search

Notice that a drop-down list button appeared when you tabbed into the Supplier column. Try typing in "Oscar Mayer" here and see what happens and then tab to the next column.





An error occurred because you attempted to enter an invalid value. The set of suppliers has already been determined in the Suppliers table. Entering a supplier here that does not exist in the Suppliers table violates referential integrity and will not be allowed by the Access DBMS.

To solve this error, select one of the options from the drop down menu or go back to the Suppliers table and add a row for Oscar Mayer. For now, just complete with an existing value.

Microsoft Access

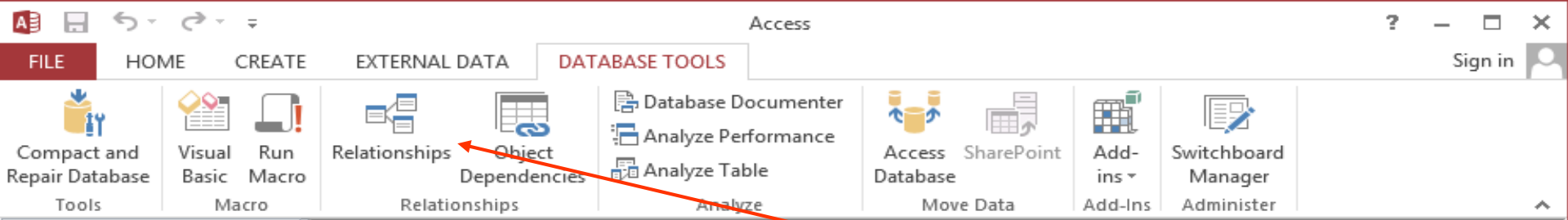
The text you entered isn't an item in the list.

Select an item from the list, or enter text that matches one of the listed items.

OK

Product I	Product Name		
58	Escargots de Bourgogne		
59	Raclette Courdavault		
60	Camembert Pierrot		
61	Sirop d'érable		
62	Tarte au sucre		
63	Vegie-spread		
64	Wimmers gute Semmelknöde		
65	Louisiana Fiery Hot Pepper Sauce	New Orleans Cajun Delights	Condiments
			Condiments
			Beverages
			Confections
			Dairy Products
			Beverages
			Dairy Products
			Dairy Products
			Seafood
			Produce
74	Longlife Tofu	Tokyo Traders	Beverages
75	Rhönbräu Klosterbier	Plutzer Lebensmittelgroßmärkte AG	Beverages
76	Lakkalikööri	Karkki Oy	Condiments
77	Original Frankfurter grüne Soße	Plutzer Lebensmittelgroßmärkte AG	Condiments
81	Hot Dog	Escargots Nouveaux	
82	canned tuna fish	Exotic Liquids	Seafood
83	Hot Dog	Oscar Mayer	





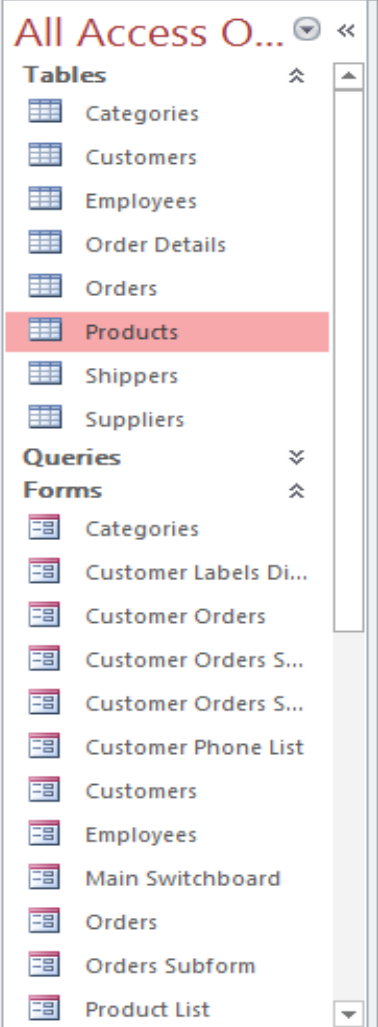
STEP 2.

From the tab selection at the top of the window select the Database Tools tab, then click the Relationships button.

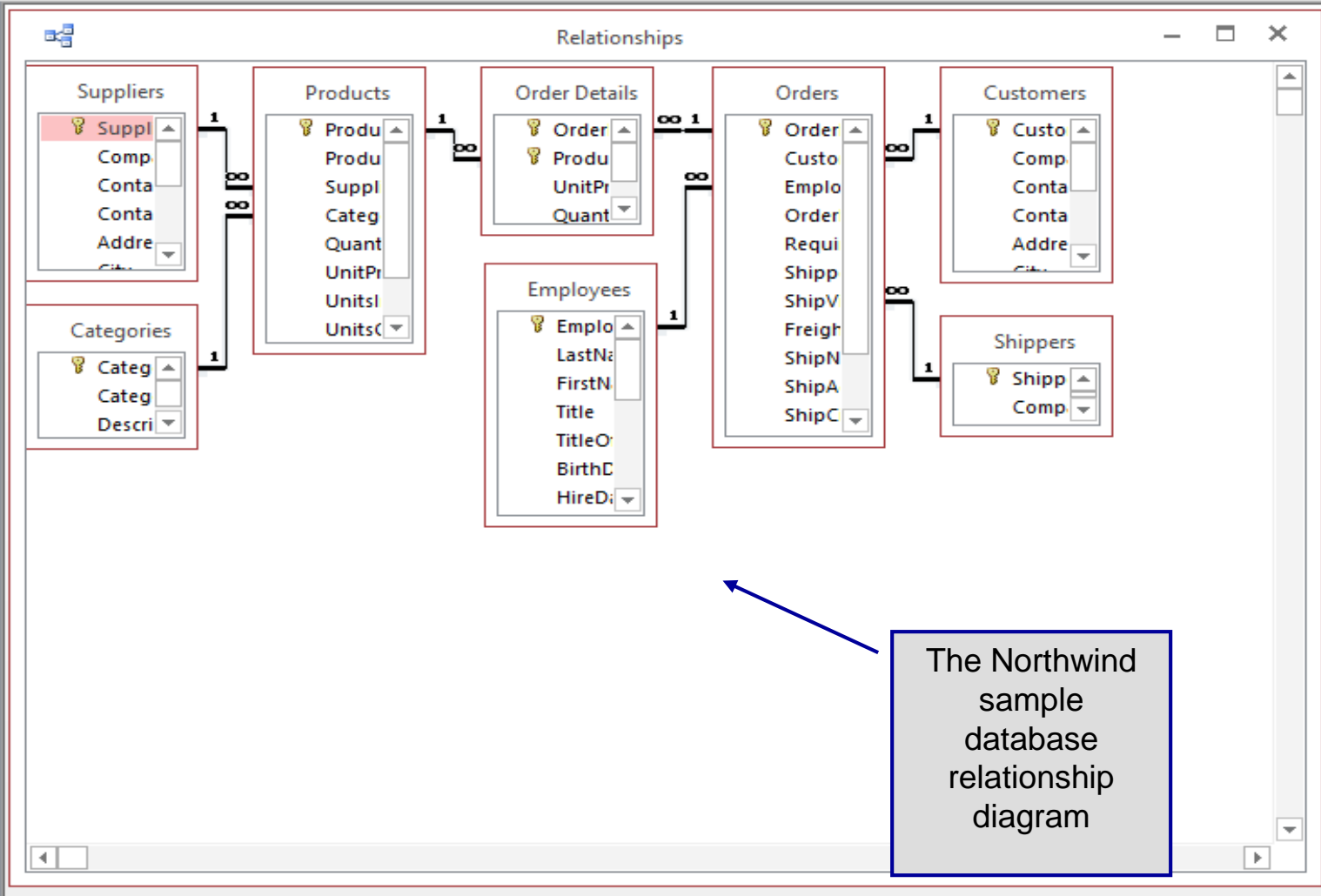
What you will see when you do this (see next slide) is the basic entities and relationships that exist in this sample database. While this is not a true ER diagram, it is close and represents the Access version of an ER diagram.

STEP 1.

Close any open tables, queries, etc. that you may have open at this point and get back to the main screen that looks like this one.



- All Access O... <<
- Tables**
- Categories
 - Customers
 - Employees
 - Order Details
 - Orders
 - Products**
 - Shippers
 - Suppliers
- Queries**
- Forms**
- Categories
 - Customer Labels Di...
 - Customer Orders
 - Customer Orders S...
 - Customer Orders S...
 - Customer Phone List
 - Customers
 - Employees
 - Main Switchboard
 - Orders
 - Orders Subform
 - Product List



The Northwind sample database relationship diagram



Assessment Point #2

- At this point you should be able to navigate through an Access db, insert new rows into a table, and view the overall design of the db.
- Our last goal for this lab will be to ask a question of the database. Our question is: “List all of the orders which have been shipped to Ernst Handel”. There are several different ways to query a database. We’ll do a simple case here.
- To query the sample database we need to filter the data in a particular relation. In this case the information that we require is maintained in the *orders* relation. If you look at the relationships view that we just saw you will see that it is this relation that contains all of the data necessary to answer our query. To pose our query we need to create the correct filter.
- We’ll create our filter a couple of different ways, just to give you some practice and experience in how to move around in Access.



Assessment Point #2

- The first technique is to go to the *orders* relation. Find the *Ship Name* attribute by scrolling along the top header row of the ordered table. Once you've found the Ship Name attribute, scroll down through the data rows until you find any row whose value for this attribute is "Ernst Handel" and highlight this attribute, as shown in the next slide.
 - To highlight an attribute value, move the cursor to the left side of the attribute location and the cursor should change into the bold cross rather than the thin cross. When this happens just left click the mouse and the attribute should be highlighted.



Access

FILE HOME CREATE EXTERNAL DATA DATABASE TOOLS **TABLE TOOLS** FIELDS TABLE

View Paste Filter Sort & Filter Records Find Window Text Formatting

Ascending Descending Remove Sort Filter by Selection Refresh All Find Size to Fit Form Switch Windows

Calibri 11 B I U

All Access O...

Tables

- Categories
- Customers
- Employees
- Order Details
- Orders**
- Products
- Shippers
- Suppliers

Queries

Forms

- Categories
- Customer Labels Di...
- Customer Orders
- Customer Orders S...
- Customer Orders S...
- Customer Phone List
- Customers
- Employees
- Main Switchboard
- Orders
- Orders Subform
- Product List

Orders

Ship Via	Freight	Ship Name	Ship Address	Ship City	Sh
Federal Shipping	\$32.38	Vins et alcools Chevalier	59 rue de l'Abbaye	Reims	
				Münster	
				Rio de Janeiro RJ	
				Lyon	
				Charleroi	
				Rio de Janeiro RJ	
				Bern	
				Genève	
				Resende	SP
				Carlos San Cristóbal	Tá
Speedy Express	\$140.51	Ernst Handel	Kirchgasse 6	Graz	
Federal Shipping	\$3.25	Centro comercial Moctezuma	Sierras de Granada 9993	México D.F.	
Speedy Express	\$55.09	Ottilies Käseladen	Mehrheimerstr. 369	Köln	
United Package	\$3.05	Que Delícia	Rua da Panificadora, 12	Rio de Janeiro RJ	
Federal Shipping	\$48.29	Rattlesnake Canyon Grocery	2817 Milton Dr.	Albuquerque	NM
Federal Shipping	\$146.06	Ernst Handel	Kirchgasse 6	Graz	
Federal Shipping	\$3.67	Folk och fä HB	Åkergatan 24	Bräcke	
Speedy Express	\$55.28	Blondel père et fils	24, place Kléber	Strasbourg	
Federal Shipping	\$25.73	Wartian Herkku	Torikatu 38	Oulu	
Speedy Express	\$208.58	Frankenversand	Berliner Platz 43	München	
Federal Shipping	\$66.29	GROSELLA-Restaurante	5ª Ave. Los Palos Grandes	Caracas	DF
Speedy Express	\$4.56	White Clover Markets	1029 - 12th Ave. S.	Seattle	W

Record: 16 No Filter Search

Once you've got the proper attribute value highlighted. Click on the "Filter by Selection" icon from the Home tab on the toolbar above. Select the option Equals "Ernst Handel".

When you click on the "Filter By Selection" with this criterion specified, you'll see the screen shown on the next slide.



Access **TABLE TOOLS** FILE HOME CREATE EXTERNAL DATA DATABASE TOOLS FIELDS TABLE

View Paste Filter Sort & Filter Records Find

Ascending Descending Remove Sort Refresh All Find

This is the listing of every order that was shipped to Ernst Handel. You should have 30 rows in your result set.

All Access O...

Tables

- Categories
- Customers
- Employees
- Order Details
- Orders**
- Products
- Shippers
- Suppliers

Queries

Forms

- Categories
- Customer Labels Di...
- Customer Orders
- Customer Orders S...
- Customer Orders S...
- Customer Phone List
- Customers
- Employees
- Main Switchboard
- Orders
- Orders Subform
- Product List

	Ship Via	Freight	Ship Name	Ship Address	Ship City	Sh
+	Speedy Express	\$140.51	Ernst Handel	Kirchgasse 6	Graz	
+	Federal Shipping	\$146.06	Ernst Handel	Kirchgasse 6	Graz	
+	Speedy Express	\$162.33	Ernst Handel	Kirchgasse 6	Graz	
+	United Package	\$101.95	Ernst Handel	Kirchgasse 6	Graz	
+	Speedy Express	\$94.77	Ernst Handel	Kirchgasse 6	Graz	
+	Speedy Express	\$126.38	Ernst Handel	Kirchgasse 6	Graz	
+	United Package	\$67.88	Ernst Handel	Kirchgasse 6	Graz	
+	Federal Shipping	\$73.79	Ernst Handel	Kirchgasse 6	Graz	
+	Speedy Express	\$458.78	Ernst Handel	Kirchgasse 6	Graz	
+	United Package	\$47.94	Ernst Handel	Kirchgasse 6	Graz	
+	United Package	\$789.95	Ernst Handel	Kirchgasse 6	Graz	
+	Federal Shipping	\$26.06	Ernst Handel	Kirchgasse 6	Graz	
+	Speedy Express	\$96.78	Ernst Handel	Kirchgasse 6	Graz	
+	Federal Shipping	\$477.90	Ernst Handel	Kirchgasse 6	Graz	
+	Speedy Express	\$78.09	Ernst Handel	Kirchgasse 6	Graz	
+	Speedy Express	\$272.47	Ernst Handel	Kirchgasse 6	Graz	
+	Federal Shipping	\$145.45	Ernst Handel	Kirchgasse 6	Graz	
+	United Package	\$11.19	Ernst Handel	Kirchgasse 6	Graz	
+	Federal Shipping	\$96.43	Ernst Handel	Kirchgasse 6	Graz	
+	Federal Shipping	\$351.53	Ernst Handel	Kirchgasse 6	Graz	
+	United Package	\$126.66	Ernst Handel	Kirchgasse 6	Graz	
+	Speedy Express	\$411.88	Ernst Handel	Kirchgasse 6	Graz	

Record: 14 Filtered Search

Assessment Point #2

- The second basic technique for using a filtering technique for a query is to again go to the *orders* relation. Find the *Ship Name* attribute by scrolling along the top header row of the ordered table. Once you've found the Ship Name attribute, click the drop-down icon on the right side of the Ship Name column header.
- This will create a drop-down dialogue box as shown on the next page.



This dialogue box appears after clicking the down arrow in the Ship Name column header.

- All Access O...
- Tables
- Categories
 - Customers
 - Employees
 - Order Details
 - Orders**
 - Products
 - Shippers
 - Suppliers
- Queries
- Forms
- Categories
 - Customer Labels Di...
 - Customer Orders
 - Customer Orders S...
 - Customer Orders S...
 - Customer Phone List
 - Customers
 - Employees
 - Main Switchboard
 - Orders
 - Orders Subform
 - Product List

	Ship Via	Freight	Ship Name	Ship Address	Ship City	Sh
+	Federal Shipping	\$32.38	Vins et alcools Chevalier			
+	Speedy Express	\$11.61	Toms Spezialitäten			
+	United Package	\$65.83	Hanari Carnes			
+	Speedy Express	\$41.34	Victuailles en stock			
+	United Package	\$51.30	Suprêmes délices			
+	United Package	\$58.17	Hanari Carnes			
+	United Package	\$22.98	Chop-suey Chinese			
+	Federal Shipping	\$148.33	Richter Supermarkt			
+	United Package	\$13.97	Wellington Importadora			
+	Federal Shipping	\$81.91	HILARIÓN-Abastos			
+	Speedy Express	\$140.51	Ernst Handel			
+	Federal Shipping	\$3.25	Centro comercial Moctezum			
+	Speedy Express	\$55.09	Ottilies Käseladen			
+	United Package	\$3.05	Que Delícia			
+	Federal Shipping	\$48.29	Rattlesnake Canyon Grocery			
+	Federal Shipping	\$146.06	Ernst Handel			
+	Federal Shipping	\$3.67	Folk och fä HB	Åkergatan 24	Bräcke	
+	Speedy Express	\$55.28	Blondel père et fils	24, place Kléber	Strasbourg	
+	Federal Shipping	\$25.73	Wartian Herkku	Torikatu 38	Oulu	
+	Speedy Express	\$208.58	Frankenversand	Berliner Platz 43	München	
+	Federal Shipping	\$66.29	GROSELLA-Restaurante	5ª Ave. Los Palos Grandes	Caracas	DF
+	Speedy Express	\$4.56	White Clover Markets	1029 - 12th Ave. S.	Seattle	W

Sort A to Z

Sort Z to A

Clear filter from Ship Name

Text Filters

- (Select All)
- (Blanks)
- Alfreds Futterkiste
- Ana Trujillo Emparedados y hel...
- Antonio Moreno Taquería
- Around the Horn
- Berglunds snabbköp
- Blauer See Delikatessen
- Blondel père et fils

OK Cancel



Microsoft Access

File Home Create External Data Database Tools Fields Table

Compact and Repair Database Tools Visual Basic Macro Run Macro Relationships Relationships Object Dependencies Database Documenter Analyze Performance Analyze Table SQL Server D

Uncheck the box for the (Select All) entry.
 After doing this none of the entries in this dialogue box will be checked.

- All Access Objj... <<
- Tables
- Categories
 - Customers
 - Employees
 - Order Details
 - Orders
 - Products
 - Shippers
 - Suppliers
- Queries >>
- Forms >>
- Reports >>
- Pages >>
- Macros >>
- Modules >>

Orders

	Shipped Dat	Ship Via	Freight	Ship Name	Ship Address	Sh
+	16-Jul-1996	Federal Shipping	\$32.38	Vins et alcools Chevalier	Abbaye	Rein
+	10-Jul-1996	Speedy Express	\$11.61	Toms Spezialitäten	Mür	
+	12-Jul-1996	United Package	\$65.83	Hanari Carnes	RIOT	
+	15-Jul-1996	Speedy Express	\$41.34	Victuailles en stock	Lyor	
+	11-Jul-1996	United Package	\$51.30	Suprêmes délices	Char	
+	16-Jul-1996	United Package	\$58.17	Hanari Carnes	Rio	
+	23-Jul-1996	United Package	\$22.98	Chop-suey Chinese	Berr	
+	15-Jul-1996	Federal Shipping	\$148.33	Richter Supermarkt	Gen	
+	17-Jul-1996	United Package	\$13.97	Wellington Importadora	Res	
+	22-Jul-1996	Federal Shipping	\$81.91	HILARIÓN-Abastos	Méx	
+	23-Jul-1996	Speedy Express	\$140.51	Ernst Handel	Köln	
+	25-Jul-1996	Federal Shipping	\$3.25	Centro comercial Moctezuma	Rito	
+	29-Jul-1996	Speedy Express	\$55.09	Ottilies Käseladen	Köln	
+	30-Jul-1996	United Package	\$3.05	Que Delícia	Rito	
+	25-Jul-1996	Federal Shipping	\$48.29	Rattlesnake Canyon Grocery	Méx	
+	31-Jul-1996	Federal Shipping	\$146.06	Ernst Handel	Köln	
+	23-Aug-1996	Federal Shipping	\$3.67	Folk och fä HB	Bräc	

Record: 1 of 830 No Filter Search

Sort A to Z

Sort Z to A

Clear filter from Ship Name

Text Filters

- (Select All)
- (Blanks)
- Alfreds Futterkiste
- Ana Trujillo Emparedados y hel
- Antonio Moreno Taquería
- Around the Horn
- Berglunds snabbköp
- Blauer See Delikatessen
- Blondel père et fils

OK Cancel



Microsoft Access

File Home Create External Data Database Tools Fields Table

Compact and Repair Database Tools Visual Basic Macro Run Macro Relationships Relationships Object Dependencies Database Documenter Analyze Performance Analyze Table Analyze SQL Server D

Scroll down until you find the entry for Ernst Handel and click it (check the box). Then click OK.

All Access Obj...

Tables

- Categories
- Customers
- Employees
- Order Details
- Orders
- Products
- Shippers
- Suppliers

Queries

Forms

Reports

Pages

Macros

Modules

Orders

	Shipped Dat	Ship Via	Freight	Ship Name	Ship Address	Sh
+	16-Jul-1996	Federal Shipping	\$32.38	Vins et alcools Chevalier	Abbaye	Rein
+	10-Jul-1996	Speedy Express	\$11.61	Toms Spezialitäten		Mür
+	12-Jul-1996	United Package	\$65.83	Hanari Carnes		RIOT
+	15-Jul-1996	Speedy Express	\$41.34	Victuailles en stock		Lyor
+	11-Jul-1996	United Package	\$51.30	Suprêmes délices		Chai
+	16-Jul-1996	United Package	\$58.17	Hanari Carnes		Rio
+	23-Jul-1996	United Package	\$22.98	Chop-suey Chinese		Berr
+	15-Jul-1996	Federal Shipping	\$148.33	Richter Supermarkt		Gen
+	17-Jul-1996	United Package	\$13.97	Wellington Importadora		Res
+	22-Jul-1996	Federal Shipping	\$81.91	HILARIÓN-Abastos		San
+	23-Jul-1996	Speedy Express	\$140.51	Ernst Handel		Graz
+	25-Jul-1996	Federal Shipping	\$3.25	Centro comercial Moctezuma		Méx
+	29-Jul-1996	Speedy Express	\$55.09	Ottilies Käseladen		Köln
+	30-Jul-1996	United Package	\$3.05	Que Delícia		Rito
+	25-Jul-1996	Federal Shipping	\$48.29	Rattlesnake Canyon Grocery		Dr.
+	31-Jul-1996	Federal Shipping	\$146.06	Ernst Handel		Graz
+	23-Aug-1996	Federal Shipping	\$3.67	Folk och fä HB	Åkergatan 24	Bräc

Record: 1 of 830 No Filter Search

Sort A to Z

Sort Z to A

Clear filter from Ship Name

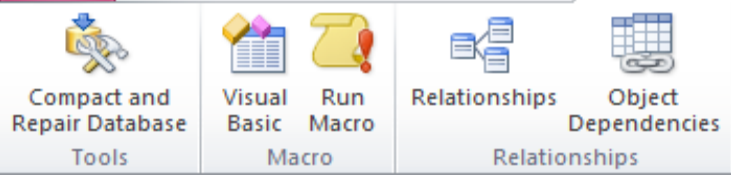
Text Filters

- Comércio Mineiro
- Consolidated Holdings
- Die Wandernde Kuh
- Drachenblut Delikatessen
- Du monde entier
- Eastern Connection
- Ernst Handel
- Familia Arquibaldo
- Folies gourmandes

OK Cancel

Name of person or company to receive the shipment. Num Lock





When you clicked OK in the previous screen, the filter was applied and now you see only those orders that were sent to Ernst Handel.
Notice that this result set is the same one you got using the first technique.

- All Access Obj...
- Tables
 - Categories
 - Customers
 - Employees
 - Order Details
 - Orders
 - Products
 - Shippers
 - Suppliers
- Queries
- Forms
- Reports
- Pages
- Macros
- Modules

	Shipped Dat	Ship Via	Freight	Ship Name	Ship Address	Sh
+	23-Jul-1996	Speedy Express	\$140.51	Ernst Handel	Kirchgasse 6	Graz
+	31-Jul-1996	Federal Shipping	\$146.06	Ernst Handel	Kirchgasse 6	Graz
+	20-Nov-1996	Speedy Express	\$162.33	Ernst Handel	Kirchgasse 6	Graz
+	02-Dec-1996	United Package	\$101.95	Ernst Handel	Kirchgasse 6	Graz
+	16-Dec-1996	Speedy Express	\$94.77	Ernst Handel	Kirchgasse 6	Graz
+	26-Dec-1996	Speedy Express	\$126.38	Ernst Handel	Kirchgasse 6	Graz
+	10-Jan-1997	United Package	\$67.88	Ernst Handel	Kirchgasse 6	Graz
+	09-Jan-1997	Federal Shipping	\$73.79	Ernst Handel	Kirchgasse 6	Graz
+	03-Feb-1997	Speedy Express	\$458.78	Ernst Handel	Kirchgasse 6	Graz
+	18-Feb-1997	United Package	\$47.94	Ernst Handel	Kirchgasse 6	Graz
+	16-May-1997	United Package	\$789.95	Ernst Handel	Kirchgasse 6	Graz
+	04-Jul-1997	Federal Shipping	\$26.06	Ernst Handel	Kirchgasse 6	Graz
+	14-Jul-1997	Speedy Express	\$96.78	Ernst Handel	Kirchgasse 6	Graz
+	18-Aug-1997	Federal Shipping	\$477.90	Ernst Handel	Kirchgasse 6	Graz
+	19-Sep-1997	Speedy Express	\$78.09	Ernst Handel	Kirchgasse 6	Graz
+	17-Oct-1997	Speedy Express	\$272.47	Ernst Handel	Kirchgasse 6	Graz
+	08-Dec-1997	Federal Shipping	\$145.45	Ernst Handel	Kirchgasse 6	Graz

Record: 1 of 30 Filtered Search

Name of person or company to receive the shipment. Num Lock Filtered



Assessment Point #3

- For further practice, suppose that of the rows we just selected, we only wanted to see those that we shipped by Federal Shipping. Can you figure out how to do this?
- Try it before you read any further.
- To accomplish this in the simplest way (basically repeating what we just did to get this first set of results), simply find one of the thirty rows that represents an order which was shipped by Federal Shipping. Then highlight this name and filter by selection again to further constrain the list of rows which now satisfy both constraints that they were shipped to Ernst Handel and done so by Federal Shipping. (See next slide for results.)



Compact and Repair Database Tools | Visual Basic Macro | Run Macro | Relationships | Object Dependencies | Database Documenter | Analyze Performance | Analyze Table | SQL Server | Access Database Move Data | SharePoint | Add-ins Add-Ins | Replication Options Administer | Switchboard Manager

- All Access Obj... <<
- Tables**
- Categories
 - Customers
 - Employees
 - Order Details
 - Orders**
 - Products
 - Shippers
 - Suppliers
- Queries** >>
- Forms** >>
- Reports** >>
- Pages** >>
- Macros** >>
- Modules** >>

Orders

	Shipped Dat	Ship Via	Freight	Ship Name	Ship Address	Ship C
+	31-Jul-1996	Federal Shippin	\$146.06	Ernst Handel	Kirchgasse 6	Graz
+	09-Jan-1997	Federal Shipping	\$73.79	Ernst Handel	Kirchgasse 6	Graz
+	04-Jul-1997	Federal Shipping	\$26.06	Ernst Handel	Kirchgasse 6	Graz
+	18-Aug-1997	Federal Shipping	\$477.90	Ernst Handel	Kirchgasse 6	Graz
+	08-Dec-1997	Federal Shipping	\$145.45	Ernst Handel	Kirchgasse 6	Graz
+	16-Dec-1997	Federal Shipping	\$96.43	Ernst Handel	Kirchgasse 6	Graz
+	18-Dec-1997	Federal Shipping	\$351.53	Ernst Handel	Kirchgasse 6	Graz
+	01-Apr-1998	Federal Shipping	\$74.60	Ernst Handel	Kirchgasse 6	Graz
+	07-Apr-1998	Federal Shipping	\$117.61	Ernst Handel	Kirchgasse 6	Graz
+		Federal Shipping	\$79.46	Ernst Handel	Kirchgasse 6	Graz
*			\$0.00			

Record: 1 of 10 Filtered Search



Lab Assignment #1

Lab Assignment #1 – Due Tuesday February 18th by 11:59 pm (WebCourses time) Total – 25 points

Submit the results of 5 different queries against 5 different relations that are part of the Northwind sample database. Each of your queries should use the “filter by selection” criteria as a means for limiting the number of rows in the result. Use whatever filters are necessary so that the results of each of your queries contains no more than 15 rows. Clearly identify, in English, each of your queries and the print out the results (cut and paste is fine, you do not need to generate reports yet). Do not use any of the built-in queries for this assignment. You can paste all your results into a single Word or PDF file for submission.

The next page shows one sample format for your submission.

NOTE: Please use the following naming convention for your uploaded file:

HW01_LastNameFirstName.doc or HW01_LastNameFirstName.pdf



Query #1: English version: List only the customers where the contact person's title is Accounting Manager.

Access version:

The screenshot shows the Microsoft Access interface. The ribbon is set to 'Table Tools' > 'Table'. The 'Customers' table is open in Datasheet View. A filter is applied to the 'Contact Title' field, showing only records where the title is 'Accounting Manager'. The table contains 10 records, with the first one highlighted.

Customer I	Company Name	Contact Name	Contact Title	
BOTTM	Bottom-Dollar Markets	Elizabeth Lincoln	Accounting Manager	23
FISSA	FISSA Fabrica Inter. Salchichas S.A.	Diego Roel	Accounting Manager	C/
HANAR	Hanari Carnes	Mario Pontes	Accounting Manager	Ru
LILAS	LILA-Supermercado	Carlos González	Accounting Manager	Ca
QUEDE	Que Delícia	Bernardo Batista	Accounting Manager	Ru
QUICK	QUICK-Stop	Horst Kloss	Accounting Manager	Ta
ROMEY	Romero y tomillo	Alejandra Camino	Accounting Manager	Gr
SUPRD	Suprêmes délices	Pascale Cartrain	Accounting Manager	Bo
VINET	Vins et alcools Chevalier	Paul Henriot	Accounting Manager	59
WARTH	Wartian Herkku	Pirkko Koskitalo	Accounting Manager	To
*				

