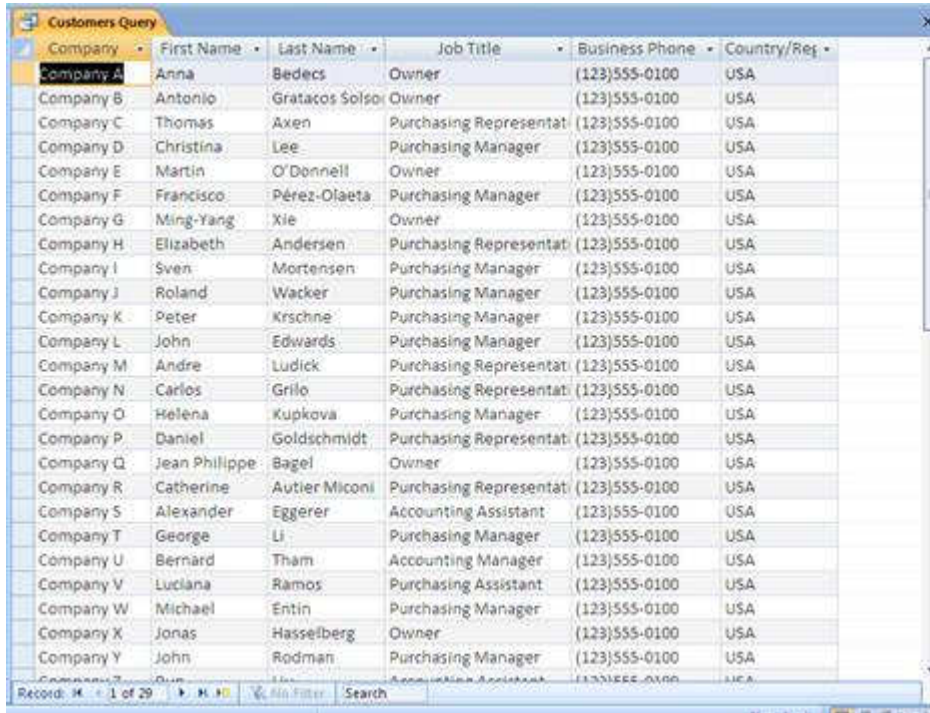


## Database Management Systems and MS Access

Attached are some pictures that might help to illustrate the difference between a query and a report.

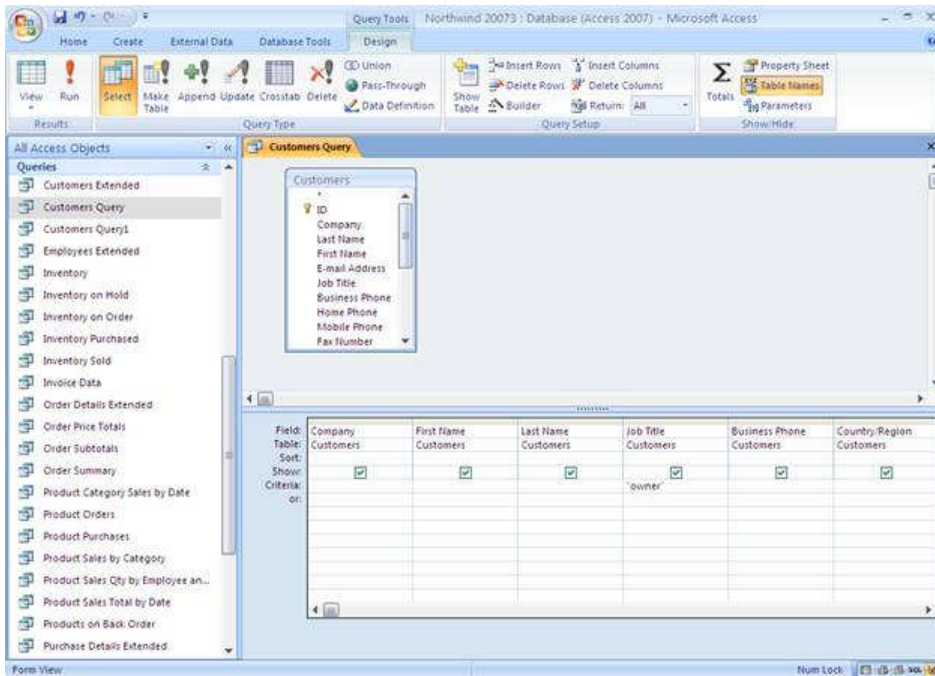
### Example 1:



The screenshot shows a Microsoft Access query window titled "Customers Query". The window displays a table with the following columns: Company, First Name, Last Name, Job Title, Business Phone, and Country/Region. The data is presented in a grid format with alternating row colors. The first row is highlighted in orange. The status bar at the bottom indicates "Record: 1 of 29".

Company	First Name	Last Name	Job Title	Business Phone	Country/Region
Company A	Anna	Bedecks	Owner	(123)555-0100	USA
Company B	Antonio	Gratacos Solso	Owner	(123)555-0100	USA
Company C	Thomas	Axen	Purchasing Representati	(123)555-0100	USA
Company D	Christina	Lee	Purchasing Manager	(123)555-0100	USA
Company E	Martin	O'Donnell	Owner	(123)555-0100	USA
Company F	Francisco	Pérez-Olaeta	Purchasing Manager	(123)555-0100	USA
Company G	Ming-Yang	Xie	Owner	(123)555-0100	USA
Company H	Elizabeth	Andersen	Purchasing Representati	(123)555-0100	USA
Company I	Sven	Mortensen	Purchasing Manager	(123)555-0100	USA
Company J	Roland	Wacker	Purchasing Manager	(123)555-0100	USA
Company K	Peter	Krschne	Purchasing Manager	(123)555-0100	USA
Company L	John	Edwards	Purchasing Manager	(123)555-0100	USA
Company M	Andre	Ludick	Purchasing Representati	(123)555-0100	USA
Company N	Carlos	Grilo	Purchasing Representati	(123)555-0100	USA
Company O	Helena	Kupkova	Purchasing Manager	(123)555-0100	USA
Company P	Daniel	Goldschmidt	Purchasing Representati	(123)555-0100	USA
Company Q	Jean Philippe	Bagel	Owner	(123)555-0100	USA
Company R	Catherine	Autier Miconi	Purchasing Representati	(123)555-0100	USA
Company S	Alexander	Eggerer	Accounting Assistant	(123)555-0100	USA
Company T	George	Li	Purchasing Manager	(123)555-0100	USA
Company U	Bernard	Tham	Accounting Manager	(123)555-0100	USA
Company V	Luclana	Ramos	Purchasing Assistant	(123)555-0100	USA
Company W	Michael	Entin	Purchasing Manager	(123)555-0100	USA
Company X	Jonas	Hasselberg	Owner	(123)555-0100	USA
Company Y	John	Rodman	Purchasing Manager	(123)555-0100	USA

01\_QueryData - Here we see raw data in the form of a customer table.



01\_QueryDesign - A programmer or database administrator then designs the query. In this case, it's just a simple listing of all Customers who are owners.

The screenshot shows the 'Customers Query' in Results view, displaying a table with 6 records. The data is as follows:

Company	First Name	Last Name	Job Title	Business Ph	Country/Reg
Company A	Anna	Bedecs	Owner	(123)555-0100	USA
Company B	Antonio	Gratacos Solso	Owner	(123)555-0100	USA
Company E	Martin	O'Donnell	Owner	(123)555-0100	USA
Company G	Ming-Yang	Xie	Owner	(123)555-0100	USA
Company Q	Jean Philippe	Bagel	Owner	(123)555-0100	USA
Company X	Jonas	Hasselberg	Owner	(123)555-0100	USA

01\_QueryResult - A table is generated that displays all customers who match the query criteria.

\*\*Points worth mentioning:

- Queries are typically generated ad hoc by an IT professional.
- They are rough in presentation, and typically detailed in nature.
- No added explanation is given for why this report might be useful.

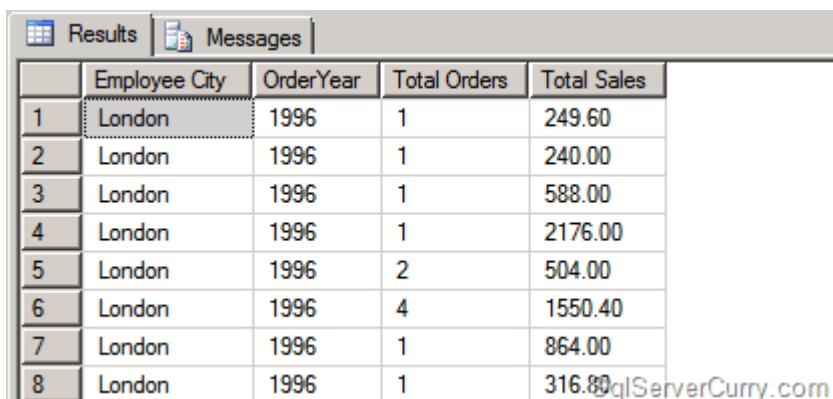
### **Example 2: (Sample query but with a report added)**

We can assume that a table with a listing of employees exists.

```
USE Northwind
GO

SELECT E.City 'Employee City', YEAR(O.RequiredDate)
OrderYear, COUNT(O.OrderID) 'Total Orders',
SUM(OD.UnitPrice * OD.Quantity) 'Total Sales'
FROM Orders O INNER JOIN [Order Details] OD
ON O.OrderID = OD.OrderID
INNER JOIN Products P
ON OD.ProductID = P.ProductID
INNER JOIN Employees E
ON O.EmployeeID=E.EmployeeID
where E.City='LONDON'
GROUP BY E.City, P.ProductName, YEAR(O.RequiredDate)
```

02\_Query -> Queries can sometimes be very cryptic. This query uses SQL (Structure Query Language) statements to generate a query that shows a sales employee's city, year, and the total value of orders taken by them in that year. It would be very hard for somebody without a databasing background to create this query.



	Employee City	OrderYear	Total Orders	Total Sales
1	London	1996	1	249.60
2	London	1996	1	240.00
3	London	1996	1	588.00
4	London	1996	1	2176.00
5	London	1996	2	504.00
6	London	1996	4	1550.40
7	London	1996	1	864.00
8	London	1996	1	316.80

02\_QueryResult -> Shows the output of this particular query

Employee City

1 of 1 100%

## Citywise Yearly Sales

London

Order Year	Total Orders	Total Sales
1996	90	51164.8000
1997	274	184806.3300
1998	204	142054.7100

SqlServerCurry.com

02\_Report -> Demonstrates the difference between a Report and a Query

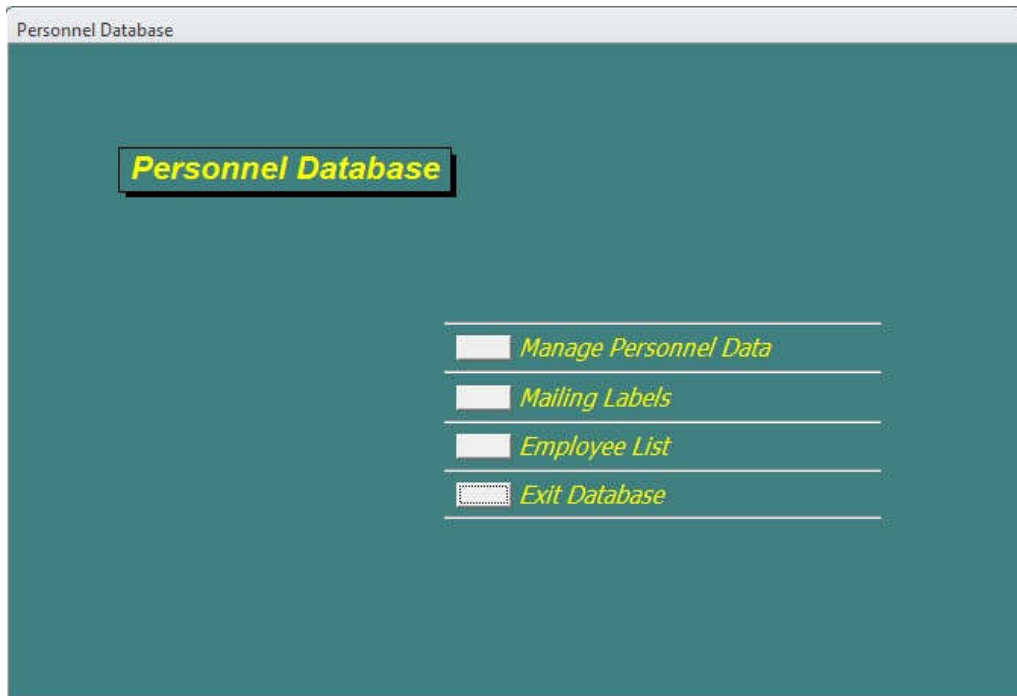
\*\*Points worth mentioning:

-Note the summary nature of this report

-Colorful / interesting presentation

-The report offers additional insight to an executive by aggregating the results.

**Example 3: (Screen shots of what an employee might use at the front end to enter data and generate reports)**



03\_Menu - Demonstrates what a menu screen might look like for an end user.

Employee Data

Employee No: 101 Last Name: Merz First Name: Kathie Middle Name / Initial: L

Work Information Contact Additional Skills

Department: 11 - Quality Assurance Shift: 1

Job Title: Quality Engineer

Hire Date: 8/10/2004 Start Date: 8/11/2004

Work Status: Reporting  Current employee

Enter file path for picture:  
(i.e. c:\pictures\me.jpg)

Photo:

Show employee pictures

Add New Employees

Edit Current Employee

View Profile

Main Menu

Record: 1 of 9 No Filter Search

03\_DataEntryScreen - Here we see a sample data entry screen for an employee named 'Kathie Merz'

**Employee Profile**

Merz, Kathie L (101)

**General Information**

<b>Employee No:</b> 101	<b>Birthdate:</b> 01-Jun-67
<b>Shift:</b> 1	<b>Address:</b> 247 Ravitz Track
<b>Job Title:</b> Quality Engineer	<b>Ocala, Florida 34478-</b>
<b>Department:</b> Quality Assurance	<b>Home Phone:</b> (555) 555-0638 ext.
<b>Work Phone:</b> (555) 555-0943 ext.3505	<b>Cell / Pager:</b> (555) 555-8202 ext.
<b>E-Mail:</b> kmerz@drewslair.com	

**Employment Information**

<b>Hire Date:</b> 10-Aug-04	<b>Start Date:</b> 11-Aug-04	<b>Current:</b> <input type="checkbox"/>	<b>Status:</b> Reporting
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**EEOC Data**

<b>Gender:</b> Female	<b>Race:</b> White	<input checked="" type="checkbox"/> <b>Veteran</b>	<input type="checkbox"/> <b>Handicap</b>
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**Skills:**

<u>Skill</u>	<u>Details</u>
Design of Experiments	Currently teaching a course at community college
Material Analysis	5 years of experience at previous company

**Notes:**

<u>Date</u>	<u>Time</u>	<u>Notes</u>
10/11/2004	7:15:26 PM	

03\_SampleReport - Sample report for KATHIE Merz generated by the system.