

# Database Software

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## 4 Queries

Previously, we used a form to enter data onto a database. Now we have a look at queries.

Searching for information from the data stored is perhaps the most important part of a database system. You might look for:

- Priti's record
- debtors who owe over £50.00
- debtors who have owed money for over one year
- debtors who have never been contacted
- debtors who are currently with the courts

A query is a search. It always has one of two possible outcomes. Either the search is successful and you find what you are looking for, or your search is unsuccessful and you do not find what your are looking for.

But first we see how to sort data.

### 4.1 Sort by Name

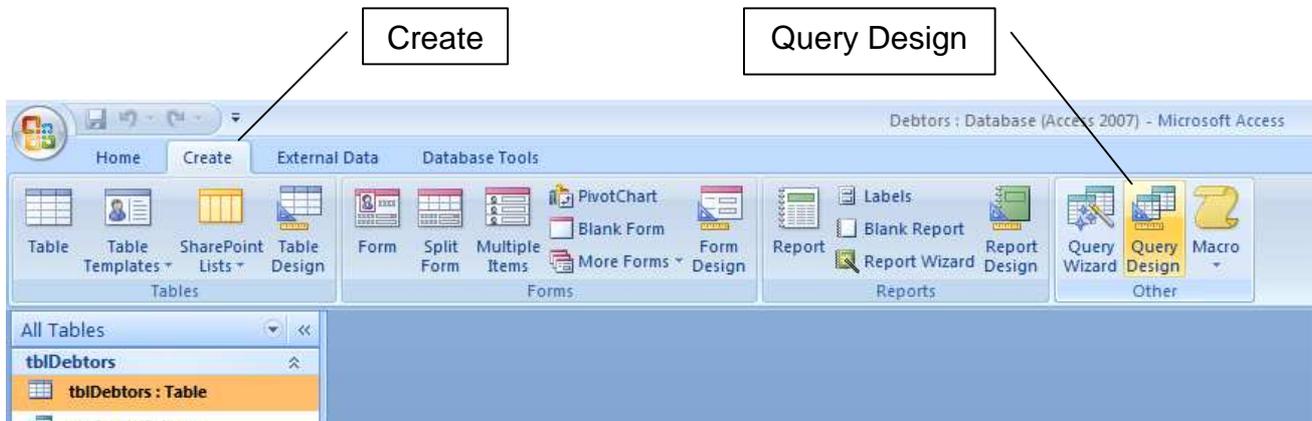
*Set up the Database*

1. Open the Debtors database
2. Security Options
3. Enable content
4. OK

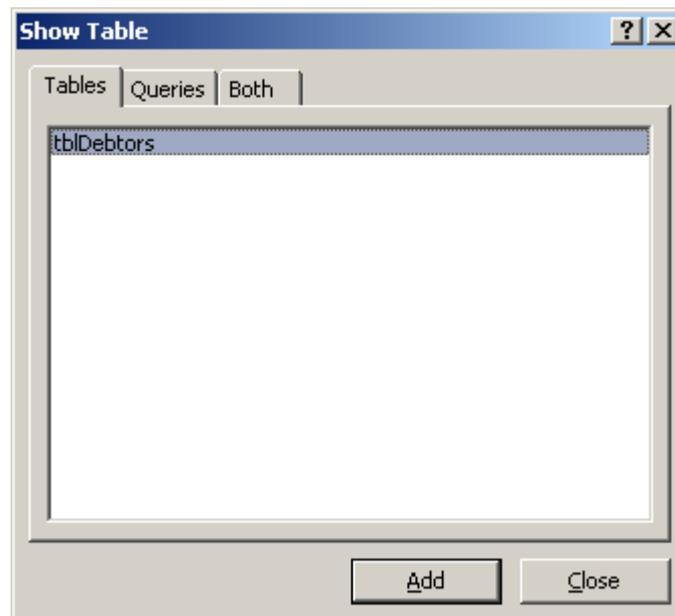


### Query by Name

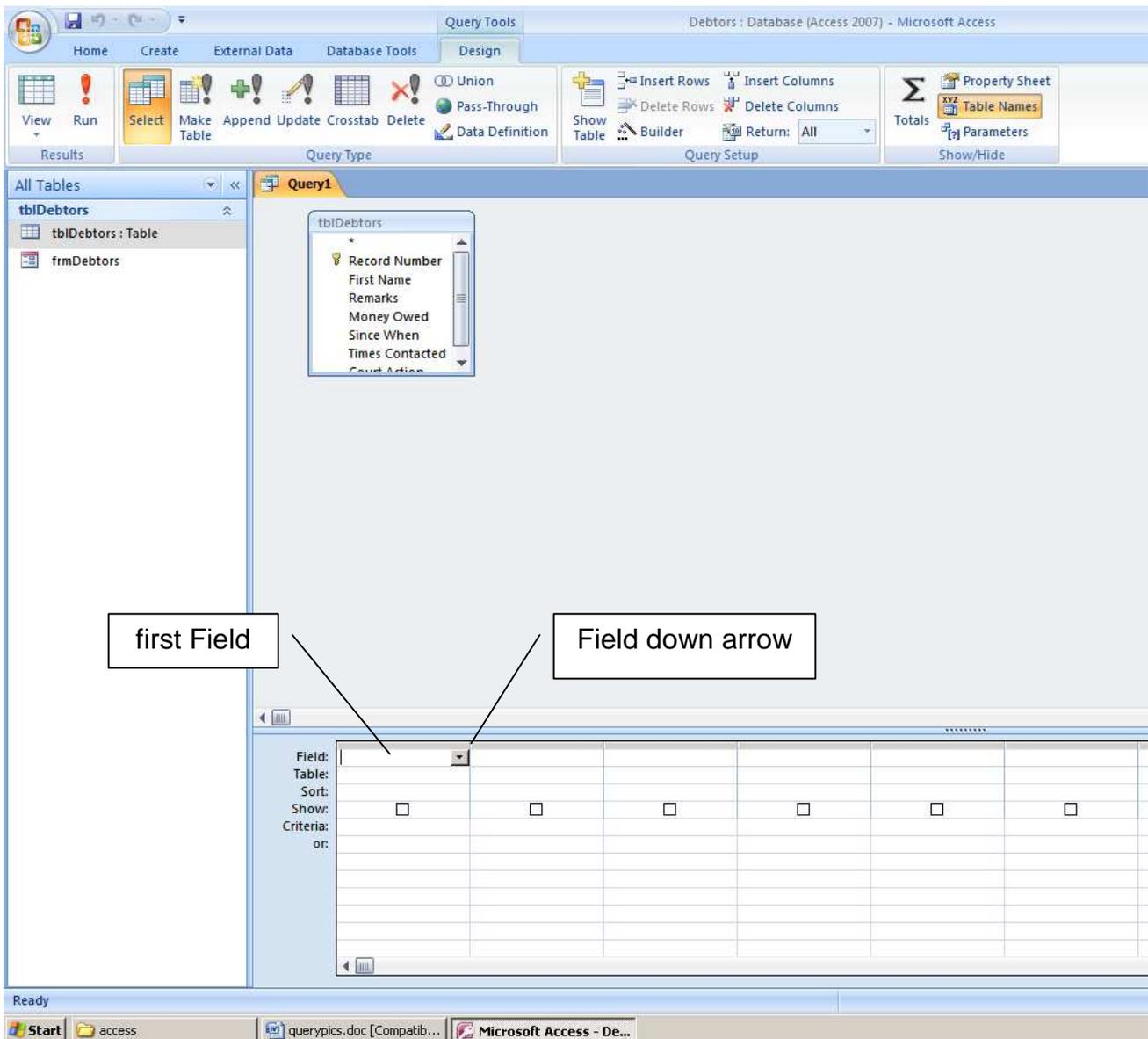
1. choose Create
2. choose Query Design



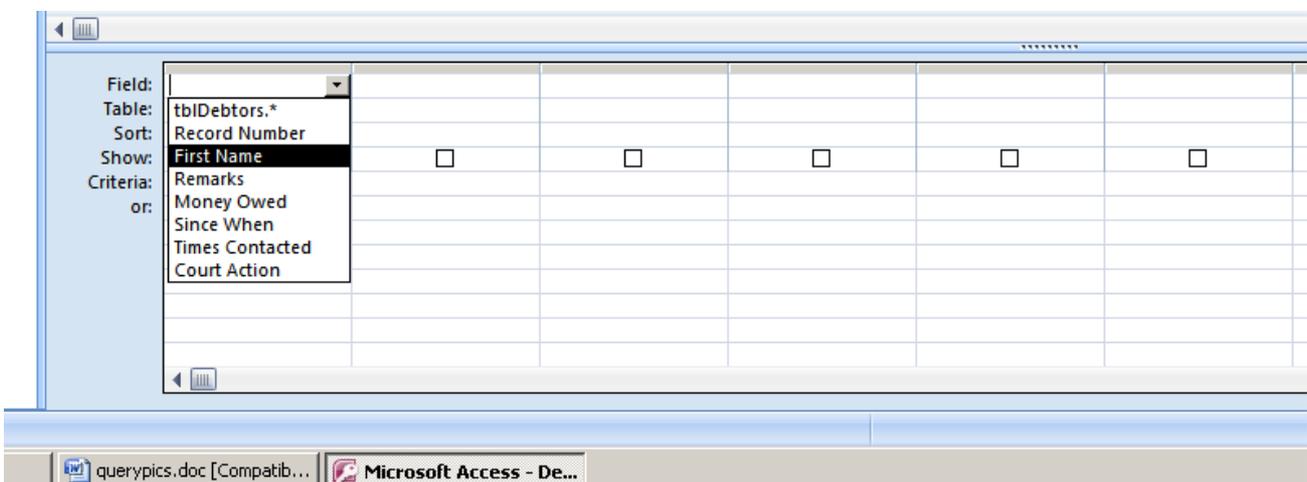
3. select the table to be queried: there is just one
4. click Add



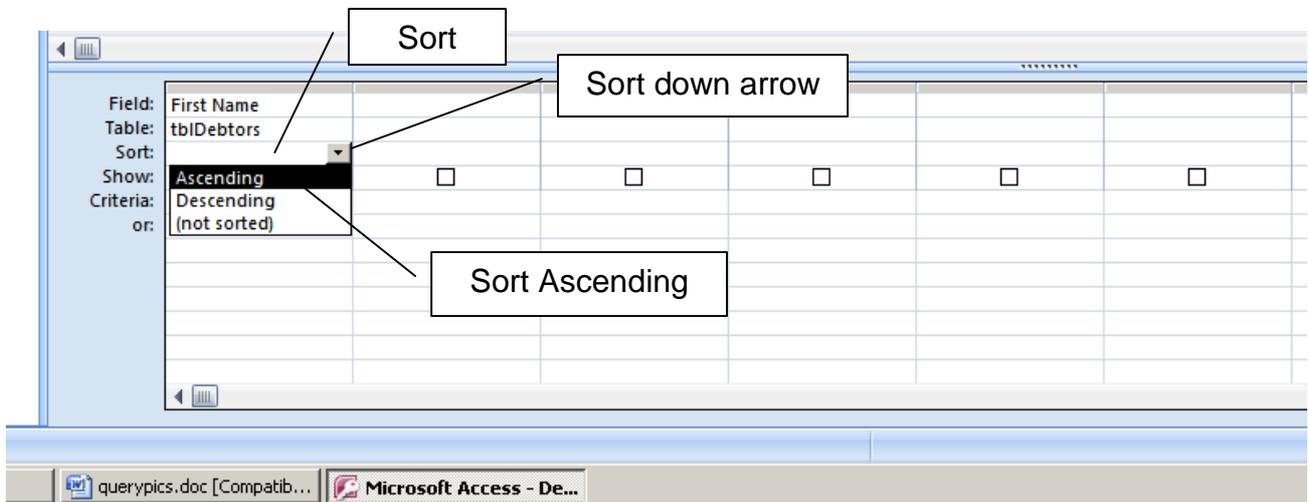
5. click Close



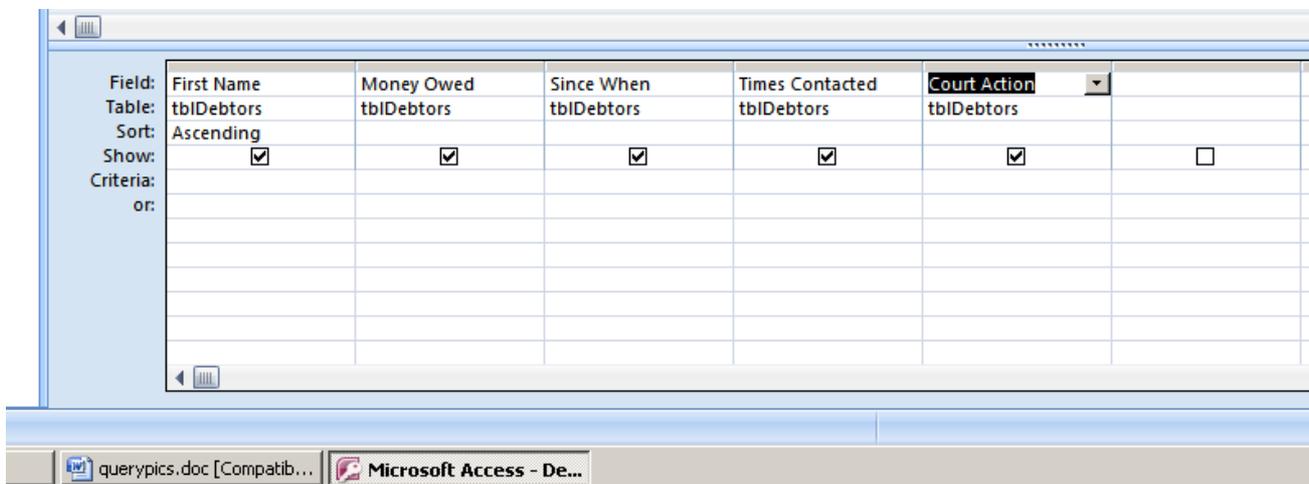
6. click in the first Field
7. click Field down arrow
8. select First Name



9. click in Sort
10. click Sort down arrow
11. click ascending

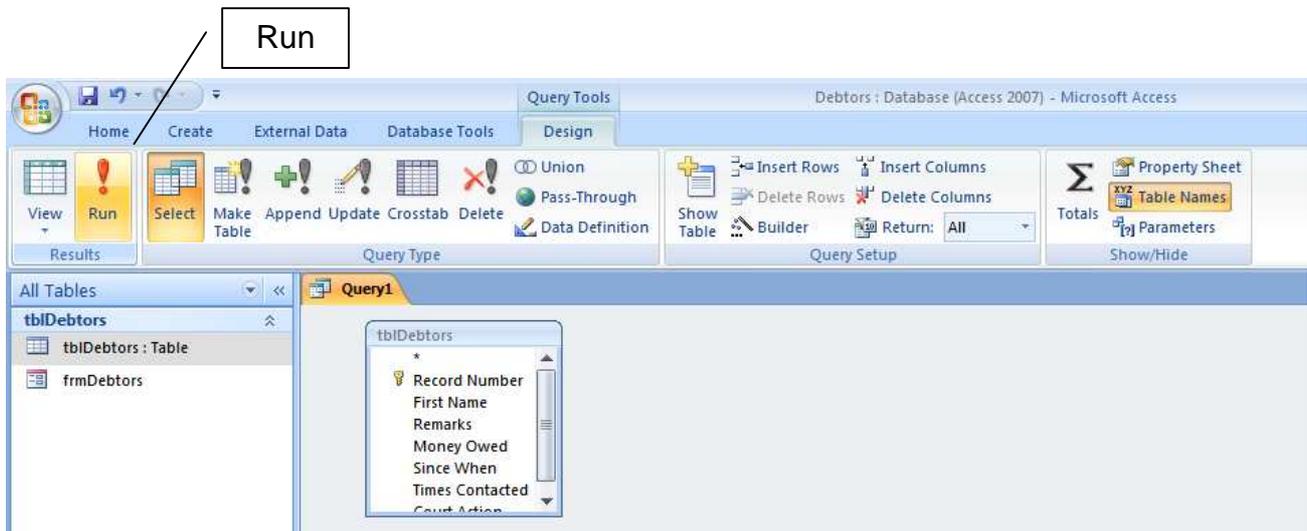


12. click in the next empty field and include, in turn, *Money Owed*, *Since When*, *Times Contacted*, and *Court Action*

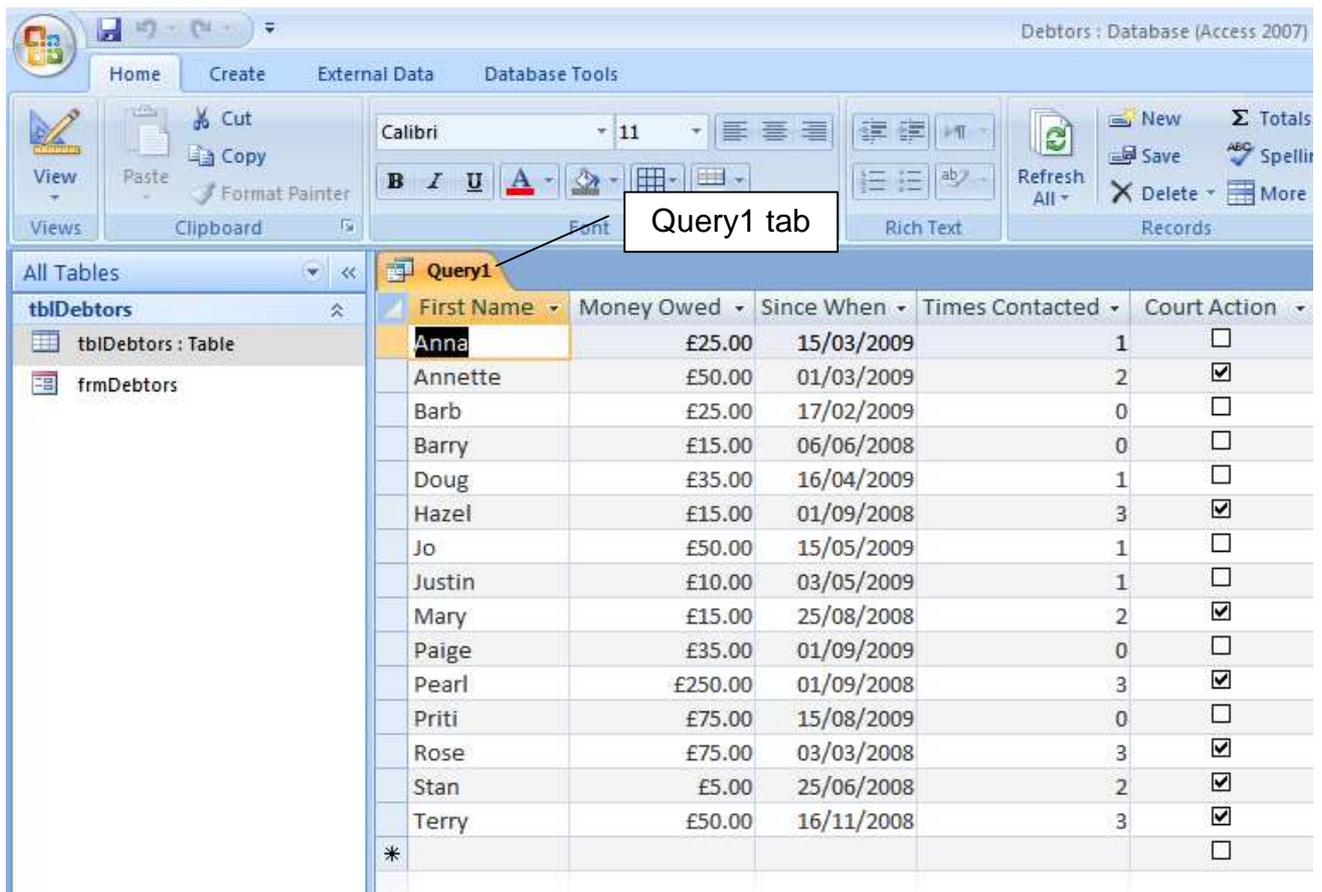


## Run the Query

1. Choose Run to run the sort query



2. check it out - names are in alphabetical order.



### Save the Query

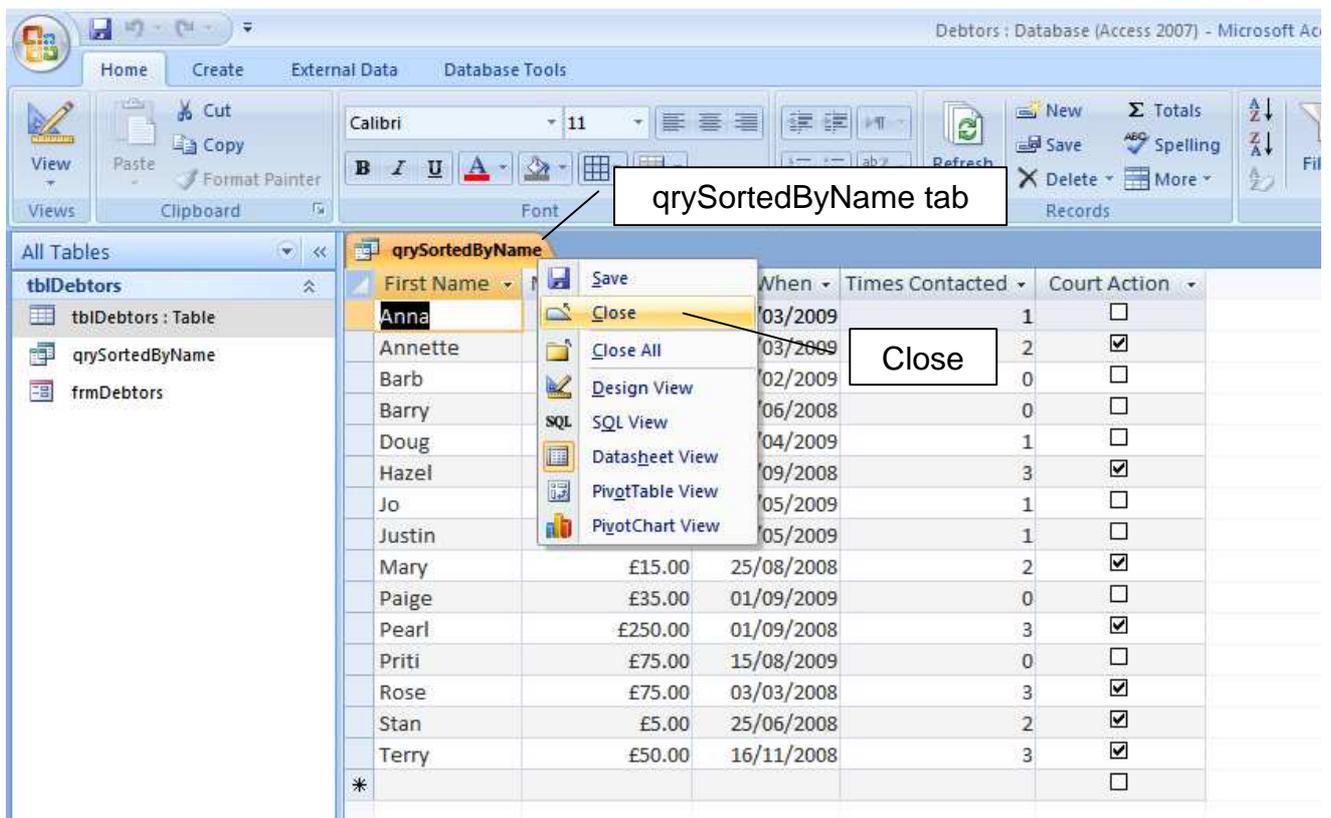
1. right click on Query1 tab
2. choose Save
3. set Query Name to *qrySortedByName*



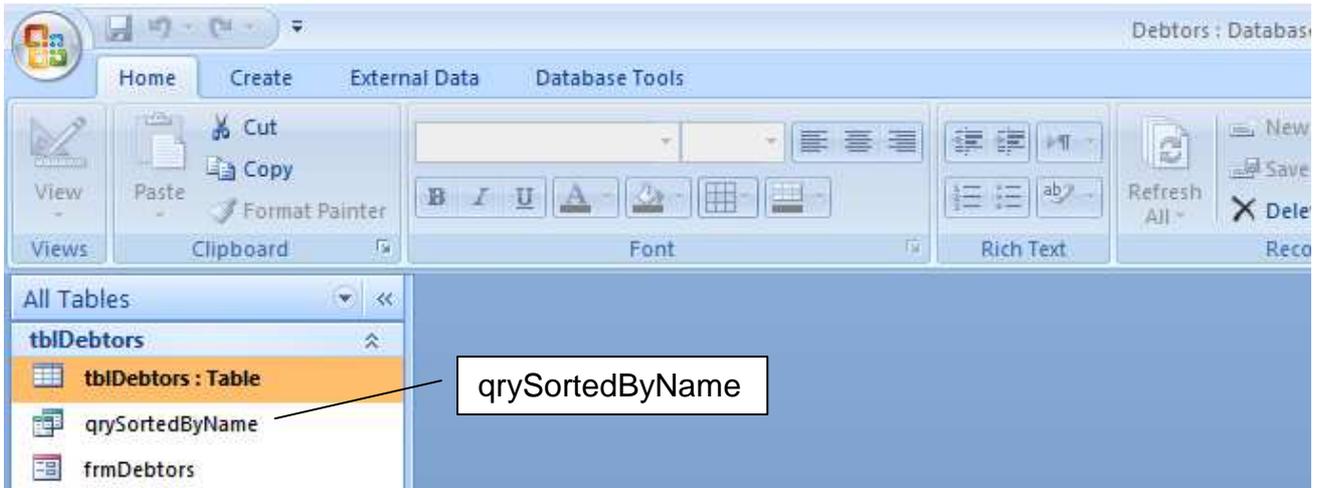
4. OK

### Return to a Blank Screen

1. right click qrySortedByName tab



2. choose Close



Notice the *qrySortedByName* listed under *tblDebtors*. You can use it again just by clicking on it.

### Exercise 4.1

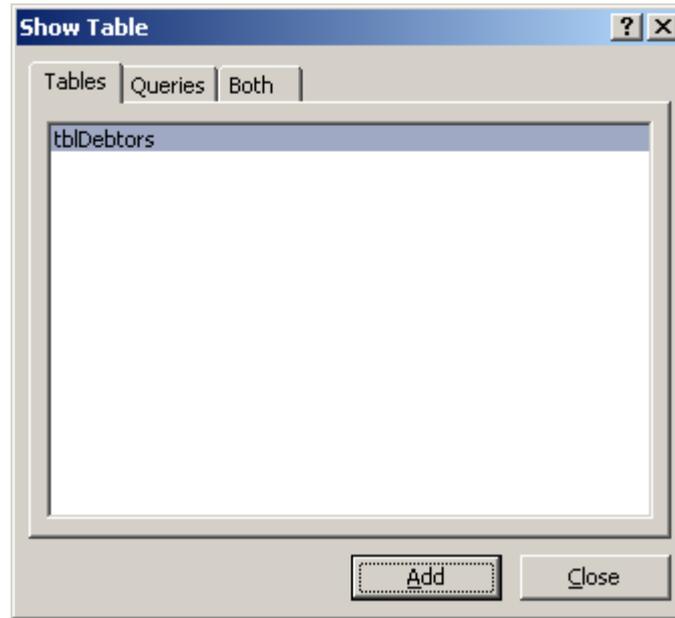
1. Sort by age of debt, oldest first. Show the fields *Since When*, *Money Owed*, *First Name*, *Times Contacted*, *Court Action*, in that order. Save the sort as *qrySortedByAge*
2. sort by size of debt, largest first. Show the fields *Money Owed*, *Since When*, *First Name*, in that order. Save the sort as *qrySortedBySize*

### 4.2 Query for Zero Times Contacted

We look for debtors who have not been contacted.

1. start with all tables, forms and queries closed. Always.
2. choose Create, Query Design





3. add tblDebtors
4. Close
5. in the first Field click down arrow and choose Times Contacted
6. in Criteria write =0

Field:	Times Contacted	First Name	Money Owed	Since When
Table:	tblDebtors	tblDebtors	tblDebtors	tblDebtors
Sort:				
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Criteria:	=0			
or:				

7. add First Name, Money Owed, since When
8. run the query and check it out

right click to Name and Close

tblDebtors	Times Contacted	First Name	Money Owed	Since When
0	Barb	£25.00	17/02/2009	
0	Paige	£35.00	01/09/2009	
0	Priti	£75.00	15/08/2009	
0	Barry	£15.00	06/06/2008	
*				

9. save the query as *qryZeroContacts*
10. close the query

## Exercise 4.2

1. create a query that will list all those who are subject to court action. Show just the *Court Action*, *First Name*, *Money Owed*, and *Since When* fields, in that order. Enter TRUE for the Court Action criteria.

## 4.3 Naming Convention

We use descriptive names for our tables, forms and queries. We prefix each name with:

prefix	Object	Example
tbl	table	tblDebtors
frm	form	frmDebtors
qry	query	qrySortedByName

We use this convention because it informs the person who has to read your database design - yourself, your lecturer, the guy copying from you, next year's students, your manager, and the guy who takes over caring for your database when you leave the company for a higher salary.

**We have** seen how to sort data and how to construct queries to search for data that matches given criteria.

**Next we** look at reports.

## Bibliography

*www.officetutorials.com* accessed August 2009

*www.dealing-with-data.net* accessed August 2009