# **Creating Access Queries**

## Select All Customer Orders

Goto Create and then select Query Design



### Select all the required tables and add them to the query

Tables	Queries	Both				
Addres	ses					
Custor	ners					
Order I Orders	Items					
People						
Sandwi	iches		 	 	 •••••	•••
Shops				 	 	
Staff						
				_		

#### Rearrange the tables in a logical order

, thi



Remove any joins not needed (e.g. Delivery Address) this does not alter the ER Diagram. Select all the required fields including the primary keys for Order and Sandwich. You can drag and drop them from the tables into the query, or select each field in the query and use the drop down list.



Arrange them in a the most readable order as it would be on the customer's invoice.

Select the correct sort order, in this case Order ID, and add any calculated fields e.g. the cost of an order item, where 2 sandwiches at £2.50 each comes to £5.00

To add a calculated field add a name such as **Cost:** then right click in the field heading and select **Build**.

Order Ite	ems Expression Builder	<u> </u>	×	
rder ID ndwhich Jantity O Ie Price	Enter an Expression to define the (Examples of expressions include Cost:	<u>: calculated query field</u> ; [field1] + [field2] and [field1] <	5) OK Cancel Help	
Paid Order	Expression Elements Example Query Comparison Constants Constants Operators Common Expressions	Expression Categories <parameters>            Order ID         FullName           House Number         Post Code           Date Ordered         Date Ordered           Date Delivered         Paid           Sandwich ID         Description           Quantity Ordered         ¥</parameters>	Expression Values	Cost:

Select the Query in the **Expression Elements**, and the select the field such as **[Quantity Ordered]**. Double click on the field to add it to the expression builder. Remove the <<Expr>> and add an asterix \* to signify multiply, and then the second field e.g. **[Sale Price]** 

Examples of expressions includ	e [field1] + [field2] and [field	d1] < 5)	
Cost: [Quantity Ordered] * [Sa	ale Price]		OK
			Cancel
			Help
			<< Less
	FullName House Number Post Code Date Ordered		

#### Click OK

Save the Query and run it, the output should look something like below

Example Query									
Order ID - FullName	<ul> <li>House Number</li> </ul>	<ul> <li>Post Code</li> </ul>	• Date Ordere •	Date Delive -	Paid	Sandwich IE      Description	Quantity Or +	Sale Price 🔹	Cost -
Chris Wood	53 Blues Road	NG23 3WE	05/09/2016	06/09/2016		684 BLT	1	£2.50	£2.5
1 Chris Wood	53 Blues Road	NG23 3WE	05/09/2016	06/09/2016		683 Brie	2	£2.50	£5.0
2 Gino Albin	84 Brooks Close	LE12 7SS	06/09/2016	07/10/2016		685 Chicken & Swe	2	£2.75	£5.5
2 Gino Albin	84 Brooks Close	LE12 7SS	06/09/2016	07/10/2016		682 Cheddar Chee	: 1	£2.00	£2.0
3 Chris Wood	53 Blues Road	NG23 3WE	06/09/2016	07/09/2016		684 BLT	1	£2.50	£2.5
3 Chris Wood	53 Blues Road	NG23 3WE	06/09/2016	07/09/2016		683 Brie	2	£2.50	£5.0
4 Gino Albin	84 Brooks Close	LE12 7SS	08/09/2016	09/09/2016		680 Goats Cheese	: 1	£2.75	£2.7
4 Gino Albin	84 Brooks Close	LE12 7SS	08/09/2016	09/09/2016		679 Chicken and N	1 2	£2.75	£5.5
(New)									

This Query can be used as a data source for forms or reports, or other queries

If you need to select only certain records then you can add search criteria under selected fields. So in my example I need to separate staff from customers

FullName	IsCustomer	House Number
People	People	Addresses
[]	Yes	

In a similar way you can select paid or unpaid orders.

#### **Aggregate Queries**

The easiest way to work out things like how many **Egg and Cress** sandwiches have been sold, you can create a new query using the Query Wizard.

Make sure that you have your **Select Customer Orders** query selected then go to Create Query Wizard.

New Query	?	×
This wizard creates a select query from the fields you pick.	Simple Query Wizard Crosstab Query Wizard Find Duplicates Query Wizard Find Unmatched Query Wizard	
	OK Cancel	

Use the Simple Query Wizard, and select SandwichID, Description and Quantity Ordered.

Simple Query Wizard	
	Which fields do you want in your query? You can choose from more than one table or query.
Tables/Queries	
Query: Select Customer Order	rs 🗸
<u>A</u> vailable Fields:	Selected Fields:
IsCustomer House Number Post Code Date Ordered Date Delivered Paid Sale Price Cost	<ul> <li>Sandwich ID Description</li> <li>Quantity Ordered</li> <li>&lt;</li> </ul>
[	Cancel < Back Next > Finish

W 1 aa 5 2 aa 7 3 cc 1 4 cc 8 5 ee 6	ould you like a detail or summary query? Detail (shows every field of every record) Summary Summary Options	
1 aa 12 2 cc 9 3 ee 6	Summary Options What summary values would you like calculated? Field Sum Avg Min Max Quantity Ordered  Canc	OK Cancel
		Count records in Order Items

Click next, then give it a name such as **Calculate Sandwiches Sold.** Save and run, it should look something like:-

Γ		Calculate Sandw	riches Sold		
	2	Sandwich ID 👻	Description $\bullet$	Sum Of Qua 👻	
		679	Chicken and M	2	
		680	Goats Cheese !	1	
		682	Cheddar Chee:	1	
		683	Brie	4	
		684	BLT	2	
		685	Chicken & Swe	2	

You can switch this query into design mode, and then change the sort order to get them in order of popularity.

Quer	у іуре		Query Setup
📑 Calcula	te Sandwiches Sold		
·			
S	elect Customer Orders		
	×		
	Order ID		
	FullName		
	IsCustomer		
	House Number		
	Post Code		
	Date Ordered		
	Date Delivered		
	Paid		
	Sandwich ID		
	Description		
	Quantity Ordered		
	Sale Price		
	Cost		
•			
Field:	Sandwich ID	Description	Sum Of Quantity Ordered: Qua
Table:	Select Customer Orders	Select Customer Orders	Select Customer Orders
Iotal:	Group By	Group By	Sum
Show:			
Criteria:	¥.	<u> </u>	

#### Which when run looks like

or:

			1000100	
	📑 Calculate Sandv			
all	🕗 Sandwich IE 👻	Description 👻	Sum Of Qua 👻	
4	683	Brie	4	
	685	Chicken & Sweetcorn	2	
	684	BLT	2	
	679	Chicken and Mayo	2	
	682	Cheddar Cheese	1	
	680	Goats Cheese Special	1	

This query could then be used as a basis for a printed report.