**Objectives:** To create a grouped report. To base a report on a query. To customize a report. To interpret simple SQL.

1. Copy your **Northwind 2007** database from last week to the D drive.   
   If you have lost this, you will need to download this again as you did last week. *Refer to Practical 7 worksheet for instructions.*
2. Use a **Report Wizard** to create a report based on the **Orders** table:

* Add the OrderID, CustomerID, and Shipping Fee fields.
* Group the report by CustomerID. *(Access will suggest that the report is so grouped.)*
* Sort within groups by OrderID. (The aim is to show the amounts spent by each customer on shipping fees, with a customer total.) Now click on the Summary Options button and choose to calculate a Sum on the Shipping Fee Field. OK it and move on. (Note that Detail and Summary is the default option)
* Choose a layout and orientation.
* Choose a style.
* Give the report the name **Orders\_prac8**. Choose to modify the report's design and finish.
* Save your report and print the first, then the last pages for your file if you wish.

1. Work through *Forms and* *Reports 🡺 Create a simple report 🡺 Understand the report sections* **and** *Forms and* *Reports 🡺 Create a grouped or summary report 🡺 Understand grouping, report sections and controls.* These explain the layout.

If you do not understand these Help pages, ask a demonstrator to go through it with you. The report facilities are similar to the corresponding facilities on a form. Note that controls are objects. Once they are selected (i.e. have black ‘handles’) they can be, moved, edited, deleted etc.

1. Modify your last report by moving the controls in the summary section down the page a bit to create some space.   
     
   Arrange for each group to start on a new page (see *Forms and* *Reports 🡺 Create a grouped or summary report 🡺 Add grouping, sorting and totals by Using the Group, Sort and Total pane.*

Read through the Change grouping options and set the option to print each record, group, or section on a separate page).   
  
The inserted page breaks will only be visible when you choose to Print Preview. Do this and then print a sample page of the modified report if you wish.

1. Read through **ALL** the sections in *Forms and reports 🡺 Summing in reports.*

Create a New Query in Design View. Add the following tables: Employees, Orders, and Order Details. Do not disturb the relationships.

* add the **ID, First Name** and **Last Name** fields from the **Employees** table to the query
* add the **Order ID, Order Date** and **Ship City** fields from the **Orders** table to the query
* add the **Product ID** and the **Quantity** fields from the **Order Details** table to the query. As there are some ‘blank’ Product IDs, ensure that no blank IDs are selected using *criteria* restriction.
* add a field called **Order Value** to the query by multiplying the **Quantity** and **Unit Price** from the Order Details table

Run this query to view the results and save it as **Employee Sales\_prac8**

1. Now use a Report Wizard on your query to set up a report showing the sales attributed within each city to each employee. Save this as **Employee Sales By City\_prac8.** Choose to modify the design.
2. Look at the report properties (Right click in top left box at edge of report window to display these). See that the record source is a query by clicking on the expression builder **…**. Close the query window and properties box.
3. Preview the report.  
   Which button allows you to change the groupings (mouse over to see functionality)?

What options are available at the bottom of the dialogue box displayed by this button?

* Arrange the different orders in your subgroups so that the biggest in value come first.
* Change the report layout so that the employees’ names are shown only once.
* Create an unbound text box control on your report to hold an **average (Av**g) for the **Order Value** for each employee (c.f. the Sum calculation in previous report).
* Create an unbound text box control on your report to hold an **average (Av**g) for the **Order Value over** all employees for each city.

1. If you were to place the average calculated control in the report footer, what would the calculation show?

1. Modify the visual appearance or totalling structure of your report if necessary. Run off a few pages on the laser printer for your file. (You should select pages to illustrate all the features of your report!)
2. You would not be expected to write complex SQL but you would be expected to write simple SQL and would be expected to explain what more complex SQL is doing in general terms.

Create a new query in Design View using the tables Products and Purchase Order Details. Choose all fields from Products (\*), Product ID from Purchase Order Details, Discontinued from Products inserting ***No*** in the criteria row.

Save this query as Query\_q and choose to view the SQL.  
  
Write out the resulting SQL with an explanation of what each part does:   
  
SELECT   
   
   
FROM   
   
   
WHERE

Amend the query in SQL view to add DINSTINCTROW after SELECT and before Products.\* and save the query as Query\_r.

What effect does this have on the query results and why?

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Now examine the SQL for the Northwind Query **Inventory Sold** and explain:   
  
SELECT   
   
   
   
FROM   
   
WHERE   
GROUP BY

**Sign Off Point:**   
 Orders\_prac8 Report, Employees Sales By City\_prac8 report, SQL interpretation

1. Whilst waiting for sign off:

* Copy your work to the M drive
* Examine the reports of the **Northwind** database in Design view and Print or Layout Preview to see the possibilities.
* Work on your assignment.