

# Introduction to Queries

Queries allow you to ask questions of your database. You can combine data from different tables, permanently find or sort data, do calculations or produce interactive dialogue boxes to allow a user to enter search data.

There are many different types of Queries, in this chapter you will be introduced to the most common type, SELECT QUERIES.

A sample database has been prepared for you. It records employee information in two tables. One table records the employee's personal details, the second table records the employee's pay details. The following diagram summarises the structure of the two tables.

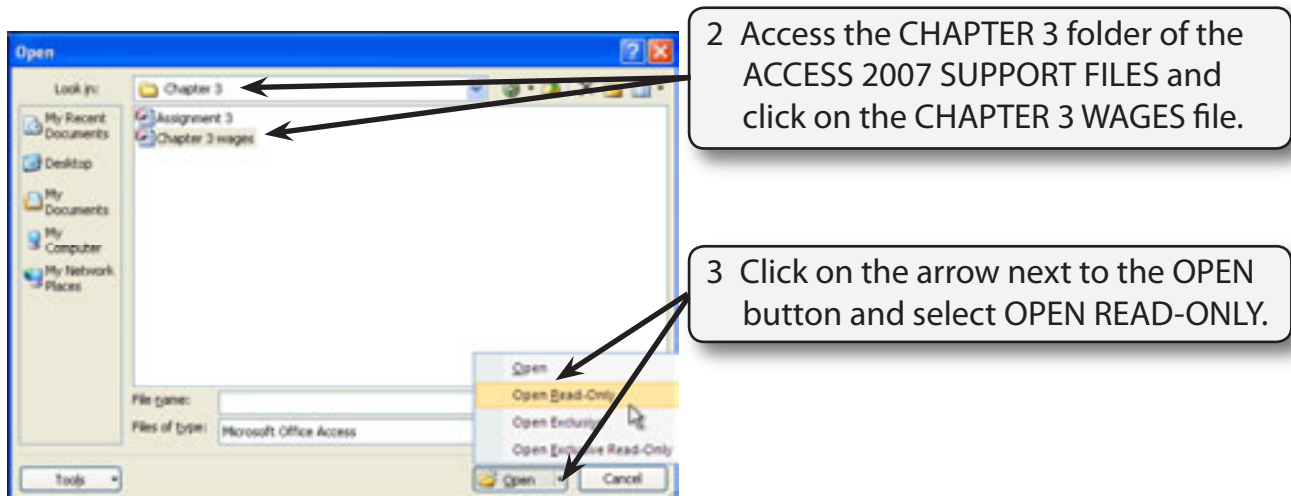
Personal Details
Employee ID
First Name
Last Name
Address

Pay Details
Employee ID
Position
Section
Weekly Hours
Pay Rate

Notice that the field EMPLOYEE ID is present in both tables. This field is called the PRIMARY KEY and it enables two tables to be linked so that data can be used from both of them in the Query.

## Loading the Sample File

- 1 Load Microsoft Access and click on the OPEN icon in the OFFICE BUTTON or QUICK ACCESS TOOLBAR.

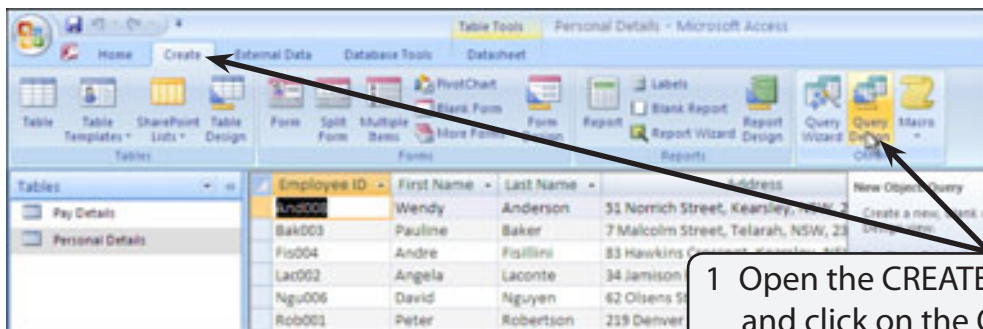


- 4 Click on the OFFICE BUTTON, highlight SAVE AS and select ACCESS 2007 DATABASE.
- 5 Access your STORAGE folder and save the database as: CHAPTER 3 WAGES 1.
- 6 Turn off the SECURITY ALERT bar if you wish

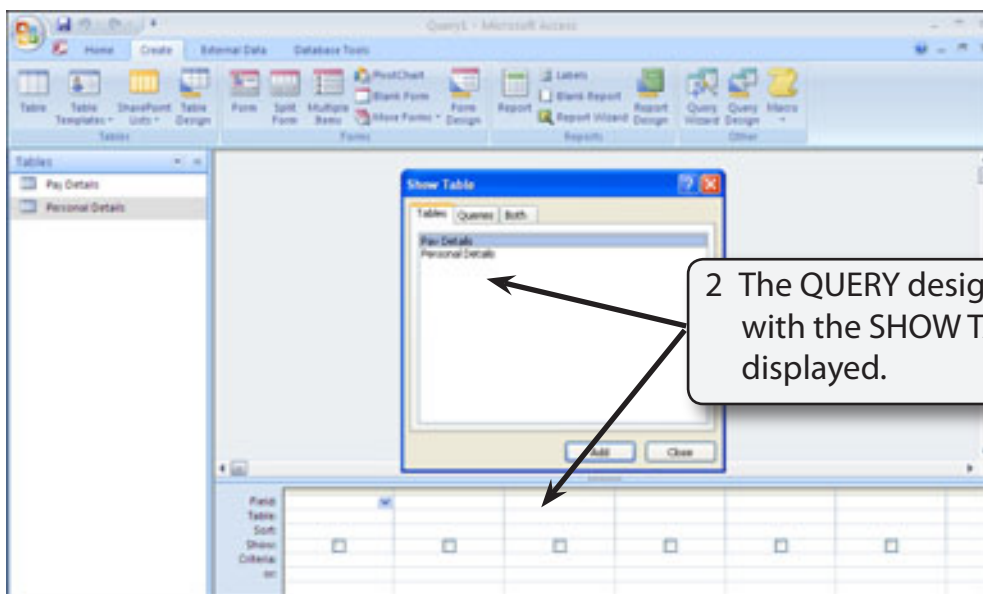
## Looking at the Tables

- 1 Open each of the two tables in turn to become familiar with the data stored in them.
- 2 Close the tables by clicking in their close boxes.

## Creating a Query

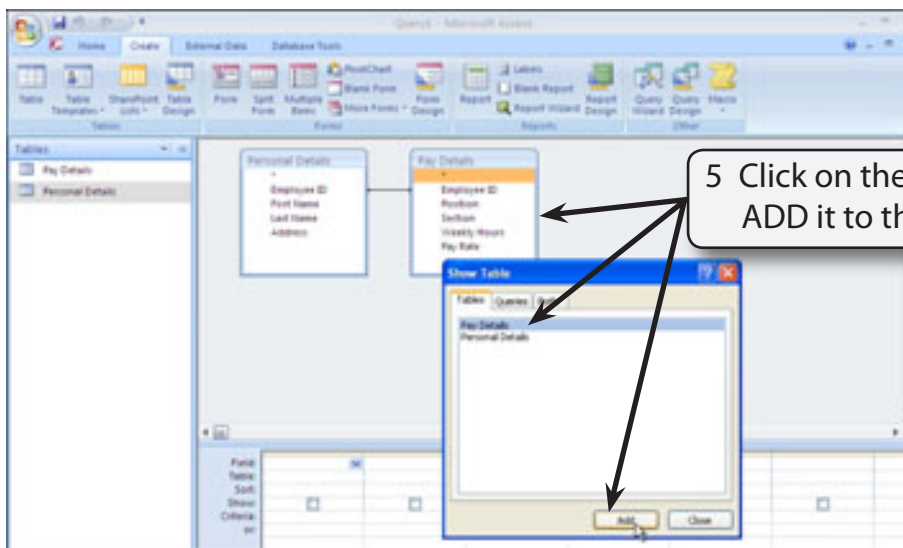
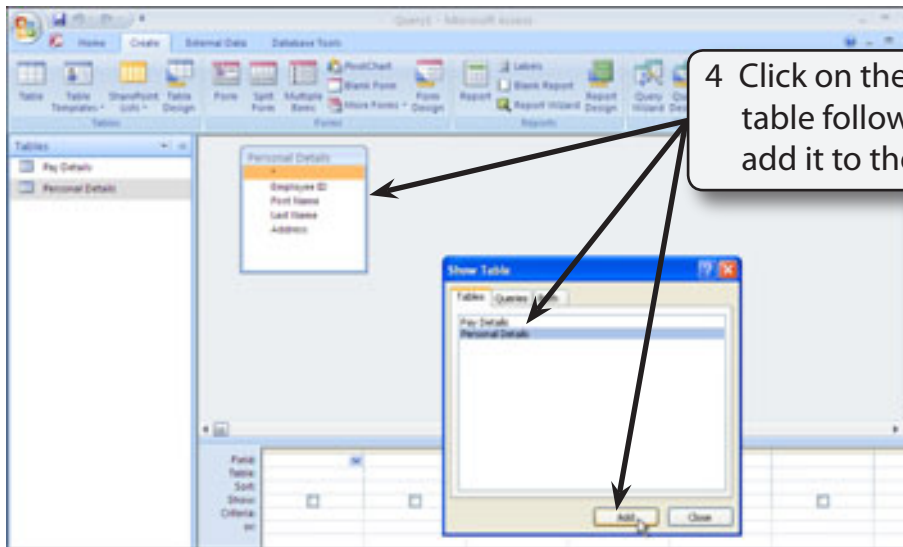


1 Open the CREATE tab in the RIBBON and click on the QUERY DESIGN icon to start the query.



2 The QUERY design screen is opened with the SHOW TABLE dialogue box displayed.

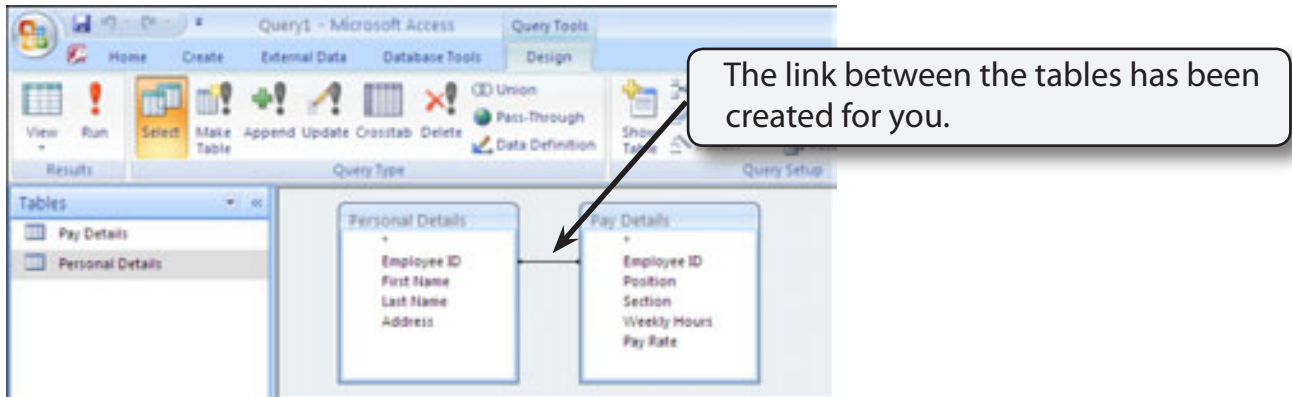
- Before the Query can be constructed the tables used by the Query need to be set.



- Close the SHOW TABLE dialogue box by clicking in its close box.

## A Linking the Tables

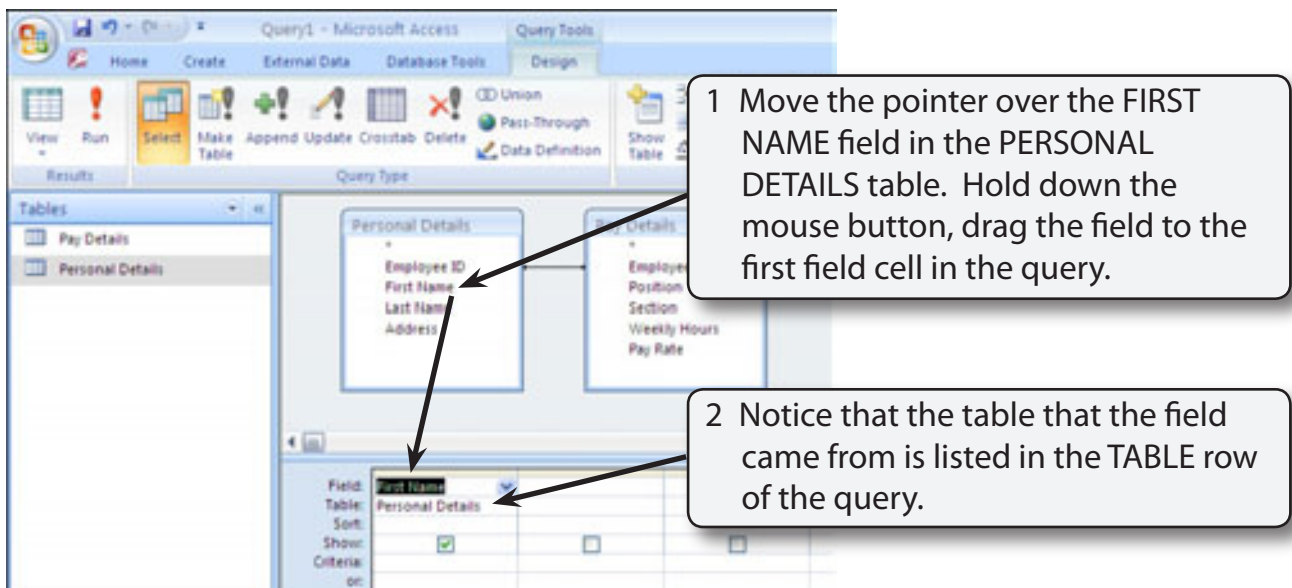
In order to create a query on multiple tables, the tables needed to be linked together using the PRIMARY KEY fields. In this case the EMPLOYEE ID field is present in both tables and it has been set as the PRIMARY KEY field in each table.

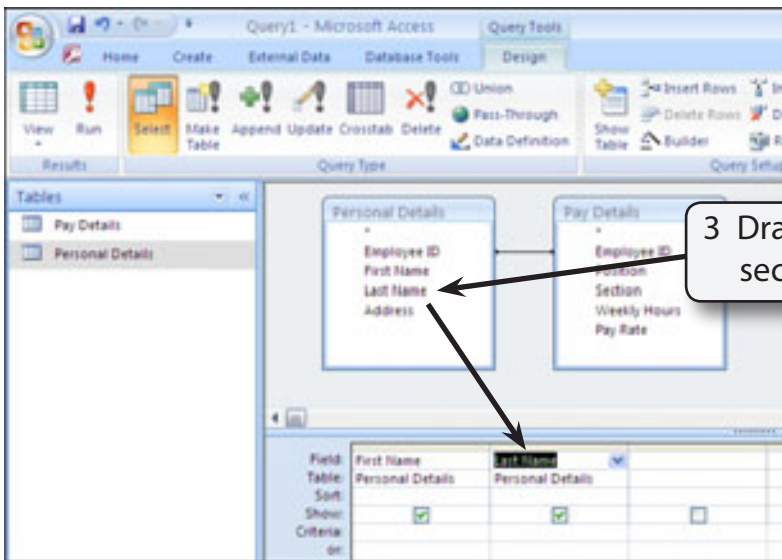


**NOTE** If the LINK or (RELATIONSHIP) line is not present in your tables, click on the EMPLOYEE ID field in the PERSONAL DETAILS table and drag the field over the EMPLOYEE ID field in the PAY DETAILS table.

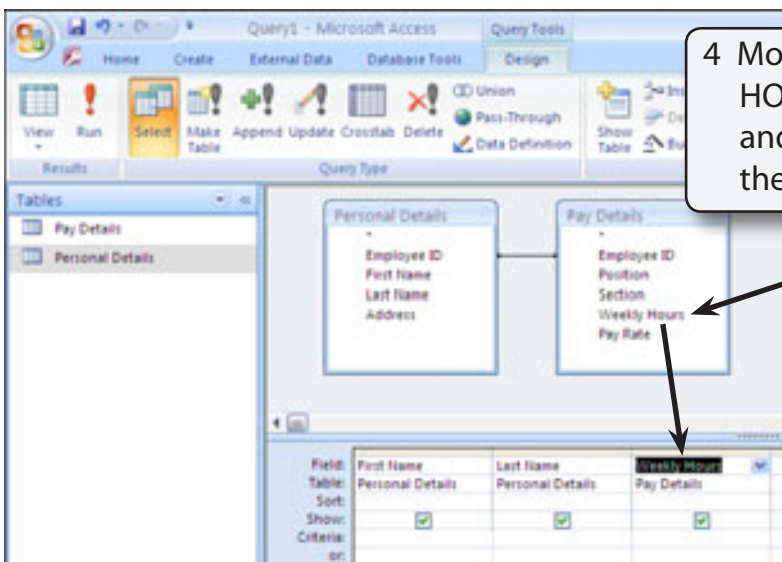
## B Building the Query

Let's create a query that displays the employee's name, weekly hours and pay rate.

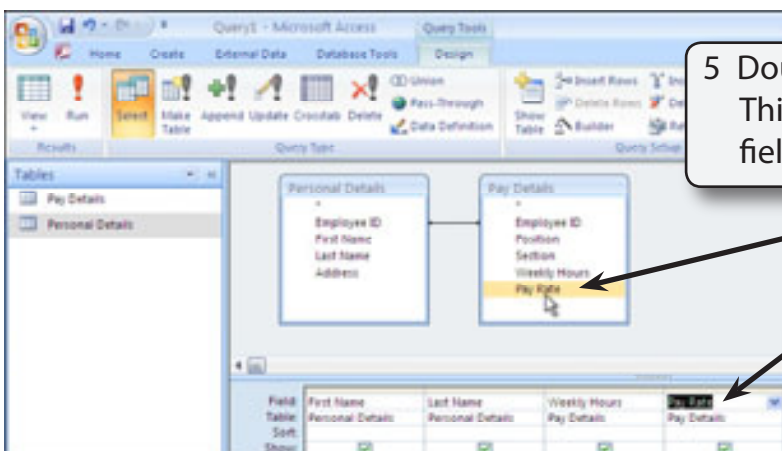




3 Drag the LAST NAME field in to the second FIELD cell in the query.



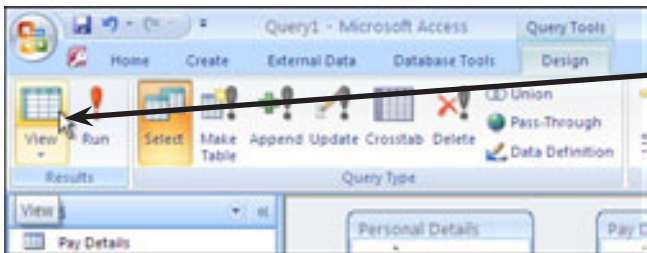
4 Move the pointer over the WEEKLY HOURS field in the PAY DETAILS table and drag it into the third field cell in the query.



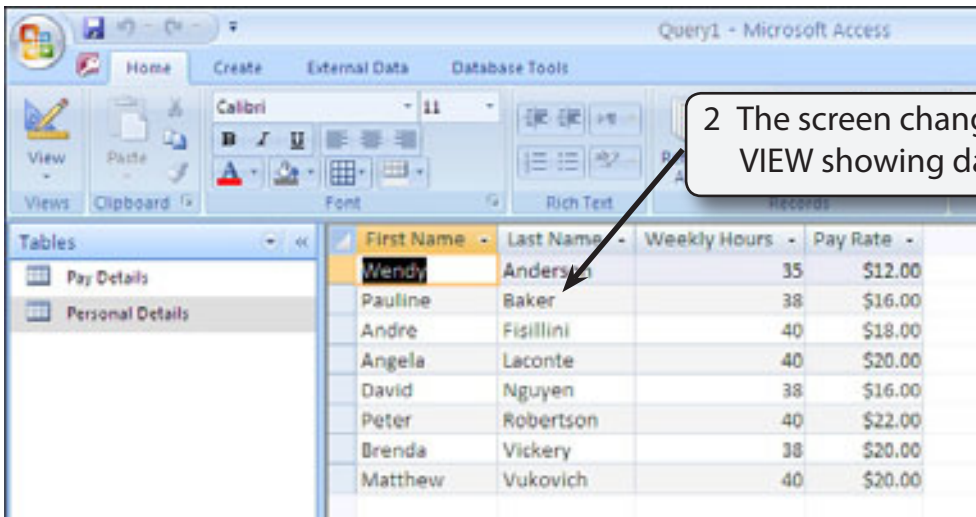
5 Double click on the PAY RATE field. This is another way of inserting a field into the next column of a query.



## C Looking at the Query



1 Click on the VIEW icon at the left of the DESIGN tab of the RIBBON (not the arrow at the base of the icon).



2 The screen changes to DATASHEET VIEW showing data from both tables.

- 3 Return to DESIGN VIEW by clicking the arrow at the base of the VIEW icon in the RIBBON and selecting DESIGN VIEW.

## D Adding a Calculation Field

We can work out how much pay each employee receives by adding a calculation field in the fifth query field cell.

- 1 Click in the fifth field cell (next to PAY RATE).
- 2 We could type the formula directly into the cell, however, the formula will not fit and it becomes difficult to see. To overcome this problem we can zoom in on the cell. Hold down the SHIFT key and press the F2 key to zoom the cell.