

# 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, SIMPLE QUERIES.

A sample database has been prepared for you which 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	Pay Details
Employee ID	Employee ID
First Name	Position
Last Name	Section
Address	Weekly Hours
	Pay Rate

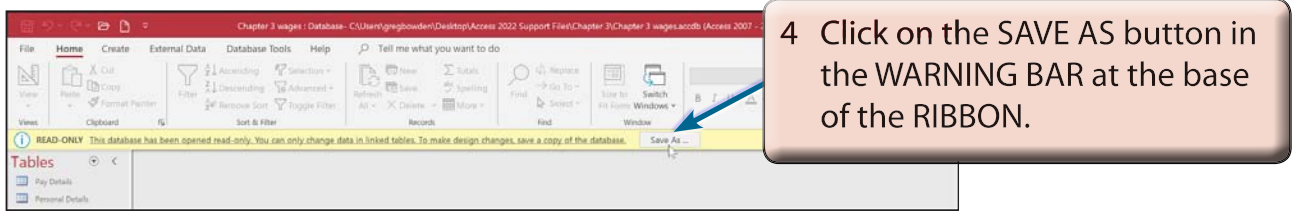
Notice that the field EMPLOYEE ID is present in both tables. This field is called the **PRIMARY KEY** and it enables two tables to be linked so that data can be used from both of them in the Query.

## Loading the Sample File

- 1 Load Microsoft Access and select OPEN in the START window or close the current file and select the OPEN option in the BACKSTAGE VIEW.

2 BROWSE to the CHAPTER 3 folder of the ACCESS 2022 SUPPORT FILES and click ONCE on the CHAPTER 3 WAGES file.

3 Click on the arrow next to the OPEN button and select OPEN READ-ONLY.



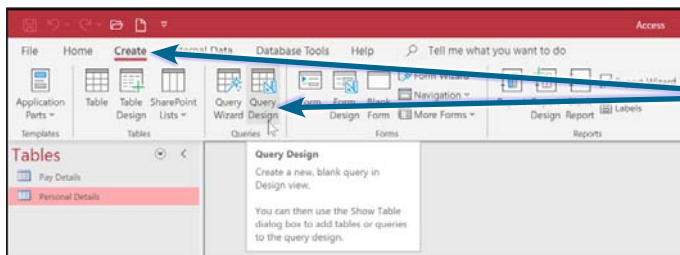
4 Click on the SAVE AS button in the WARNING BAR at the base of the RIBBON.

- 5 Access your STORAGE folder and save the database as: CHAPTER 3 WAGES COPY.
- 6 Click on the ENABLE CONTENT button to display the data.

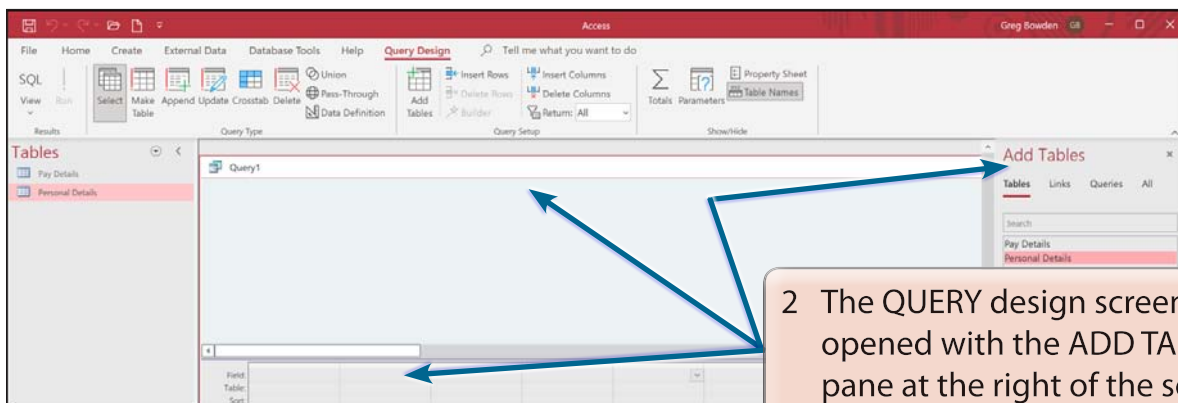
## Looking at the Tables

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

## Creating a Query



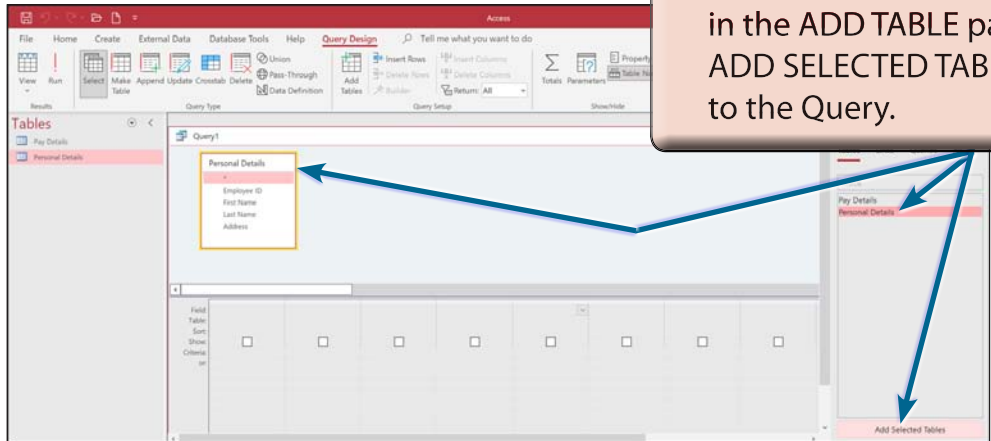
1 Open the CREATE tab in the RIBBON and click on the QUERY DESIGN icon to start the query.



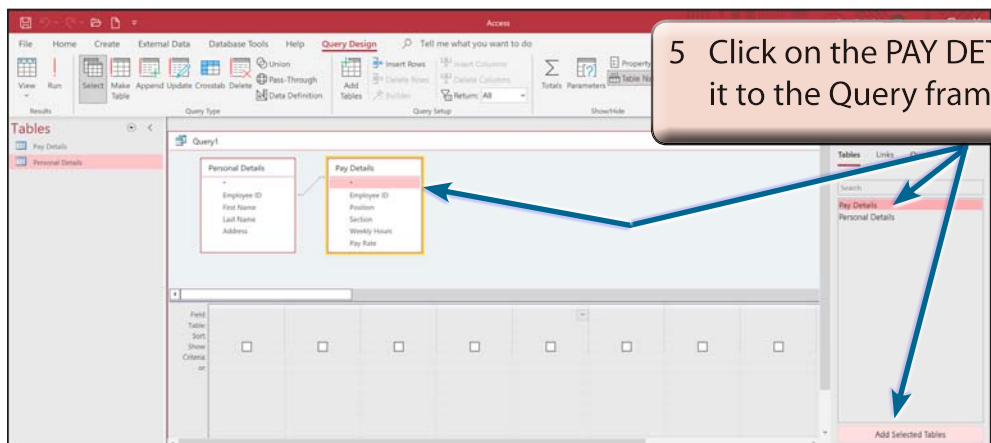
2 The QUERY design screen is opened with the ADD TABLES pane at the right of the screen.

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

4 Click on the PERSONAL DETAILS table in the ADD TABLE pane followed by the ADD SELECTED TABLE button to add it to the Query.



5 Click on the PAY DETAILS table and ADD it to the Query frame.



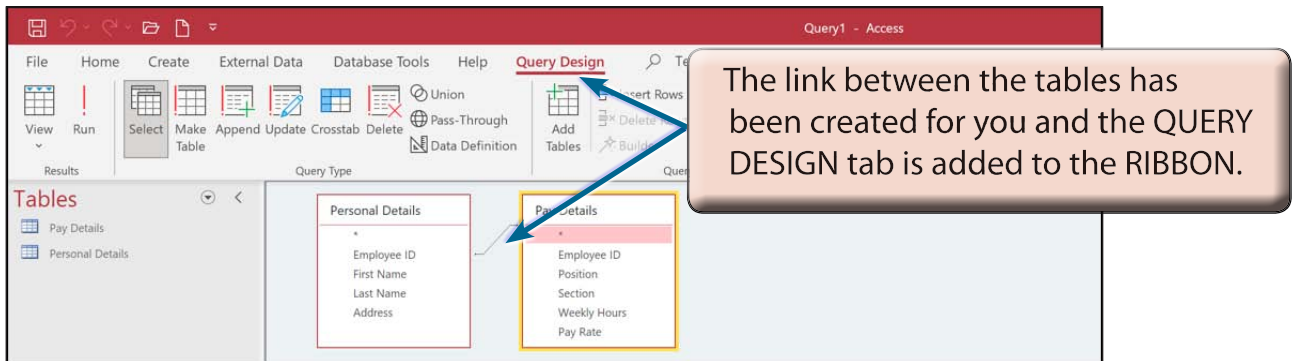
6 Close the ADD TABLES pane by clicking on its CLOSE button (x).

7 Click on the MAXIMIZE icon to expand the Query window.



## 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 a LINK or (RELATIONSHIP) line is not present between your tables, click on the EMPLOYEE ID field in the PERSONAL DETAILS table, drag the field over the EMPLOYEE ID field in the PAY DETAILS table and select OK.

## B Building the Query

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

