

If you haven't already done so, run the SQL script in the above folder in SQL Server Management Studio to generate a database (not for commercial use or copying) called **MAM**.

In a new workbook, in PowerPivot import from this **MAM** database the following tables:



- **tblCentre**
- **tblPos**
- **tblStore**
- **tblTown**
- **tblTransaction**

The aim of this exercise is to create the following pivot table:

Town	Average of Quantity
Sutton Coldfield	2.00
Burnley	2.00
Tunbridge Wells	1.83
Aldershot	1.75
Grimsby	1.70
Chatham	1.69

*This pivot table shows that **Sutton Coldfield** and **Burnley** are the towns with the highest average quantity purchased.*

To help you do this, create the following data model:

<div>  Town </div> <div> <input checked="" type="checkbox"/> TownName </div>
<div>  Transaction </div> <div> <input type="checkbox"/> Price <input checked="" type="checkbox"/> Quantity </div>

The data model should contain well-named tables, and no unnecessary details. See if you can also import only the bare minimum of fields that you need to get the pivot table to work.

Whoops! We've forgotten to add in the **tblProduct** table. Go back into PowerPivot and add this table, but only importing products where the full price is £15 or more.

*You'll also need to create a relationship between the product and transaction tables, and may also need to change the properties of the transaction table to add in the **ProductId** column so that you can link to it.*

Amend your data model and pivot table so that they look like this:

Product	<input checked="" type="checkbox"/> ProductName
Transaction	<input type="checkbox"/> Price <input checked="" type="checkbox"/> Quantity
Town	<input checked="" type="checkbox"/> TownName

The revised data model, with the product name field.

Amend your pivot table so that it shows the number of transactions, sorted by town name:

Count of Quantity			
	Simon	The Emperor	(blank)
Aintree	5		49
Aldershot			8
Altrincham	4		23
Andover	3	1	26
Ashford	18		72
Ashton Under Lyne			17

*The **(blank)** column shows all of the transactions which don't have a matching product (because we didn't import it)*

Save this workbook as **Data models are fun**, and close it down.