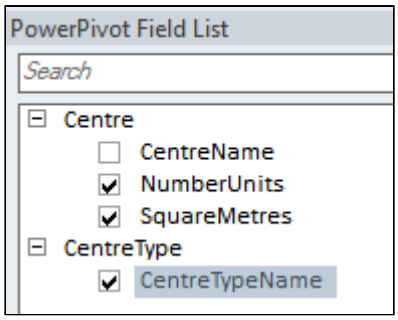
To start, if you haven't already done so run the script in the above folder to generate the **MAM** database (not for commercial use or copying).

Create the following pivot table based on the two tables **tblCentreType** and **tblCentre**:

Row Labels	Sum of NumberUnits	Sum of SquareMetres
Factory Outlet	1,043	258,330
Retail Park	1,330	2,292,330
Shopping Centre	18,508	8,974,171
Shopping Park	292	379,294
Grand Total	**21,173**	**11,904,125**

You shouldn't need to create any measures for this bit of the exercise.

Here's what your PowerPivot field list should look like at this point:



The list of fields in the PowerPivot data model.

Create a measure and display it in your pivot table to show the average ratio of square metre area to number of units for each shopping centre:

Row Labels	Sum of NumberUnits	Sum of SquareMetres	Average ratio
Factory Outlet	1,043	258,330	257.55
Retail Park	1,330	2,292,330	2,062.14
Shopping Centre	18,508	8,974,171	#NUM!
Shopping Park	292	379,294	1,918.25
Grand Total	**21,173**	**11,904,125**	**#NUM!**

The average ratios include some which display errors.

*Use the **AVERAGEX** function.*

Why do some rows show an error?

Double-click on one of the average ratios which doesn't contain errors, and test in Excel that PowerPivot is showing the correct answer.

Save this workbook as **How to get round this**, and close it down.