

Data Model

Microsoft Power BI

Contoso Example Data for Power BI

- **Products** contains information about the products sold by Contoso.
- **Sales** contains detailed sales, one row for each individual sale.
- **Stores** information about the stores where the sales were transacted.
- **Calendar** a helper table that contains the calendar

Microsoft Power BI

Download files from Git Hub

<https://github.com/laploy/BI2018>

 Contoso Calendar.xlsx

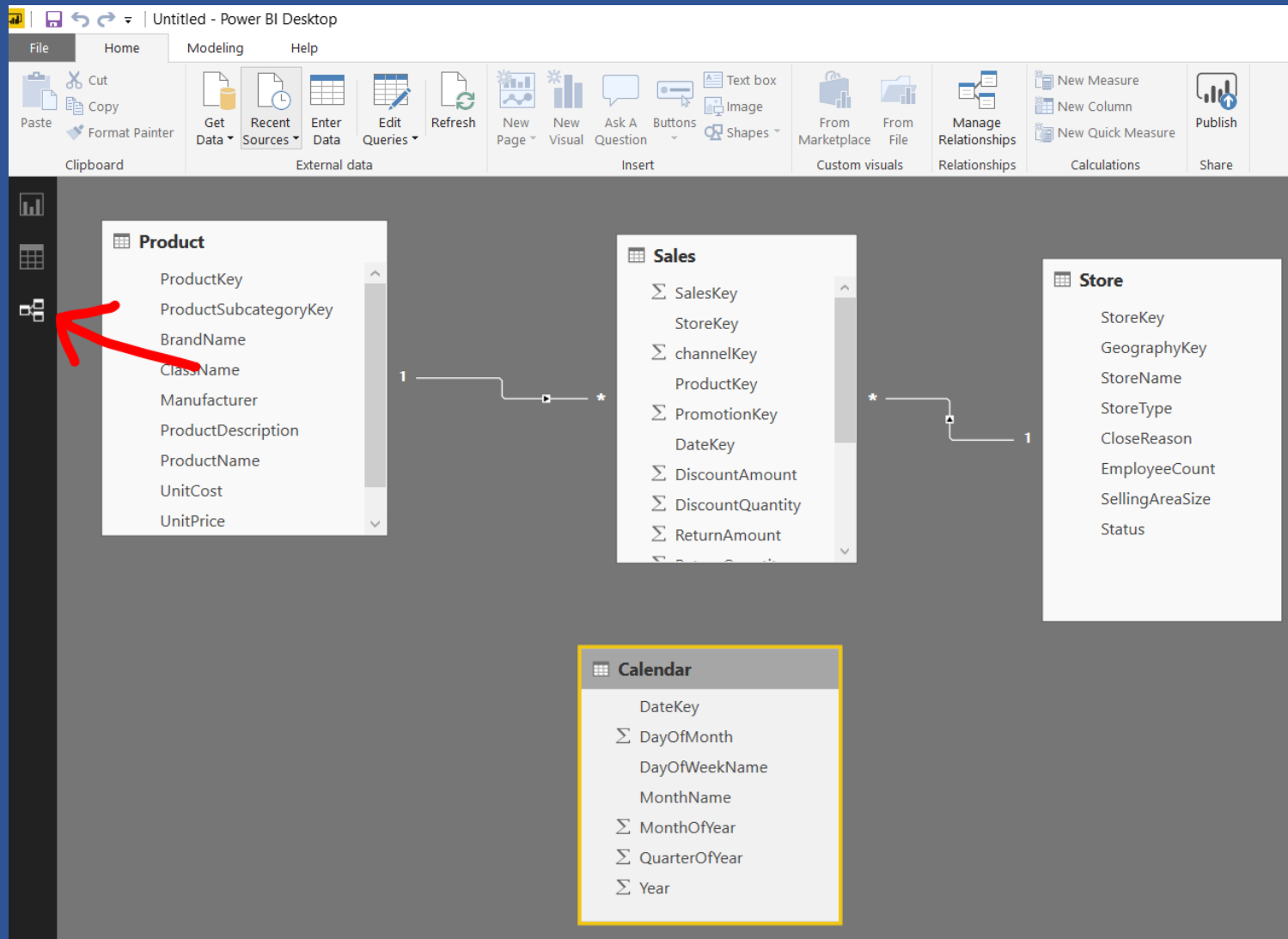
 Contoso Product.xlsx

 Contoso Sales.xlsx

 Contoso Store.xlsx

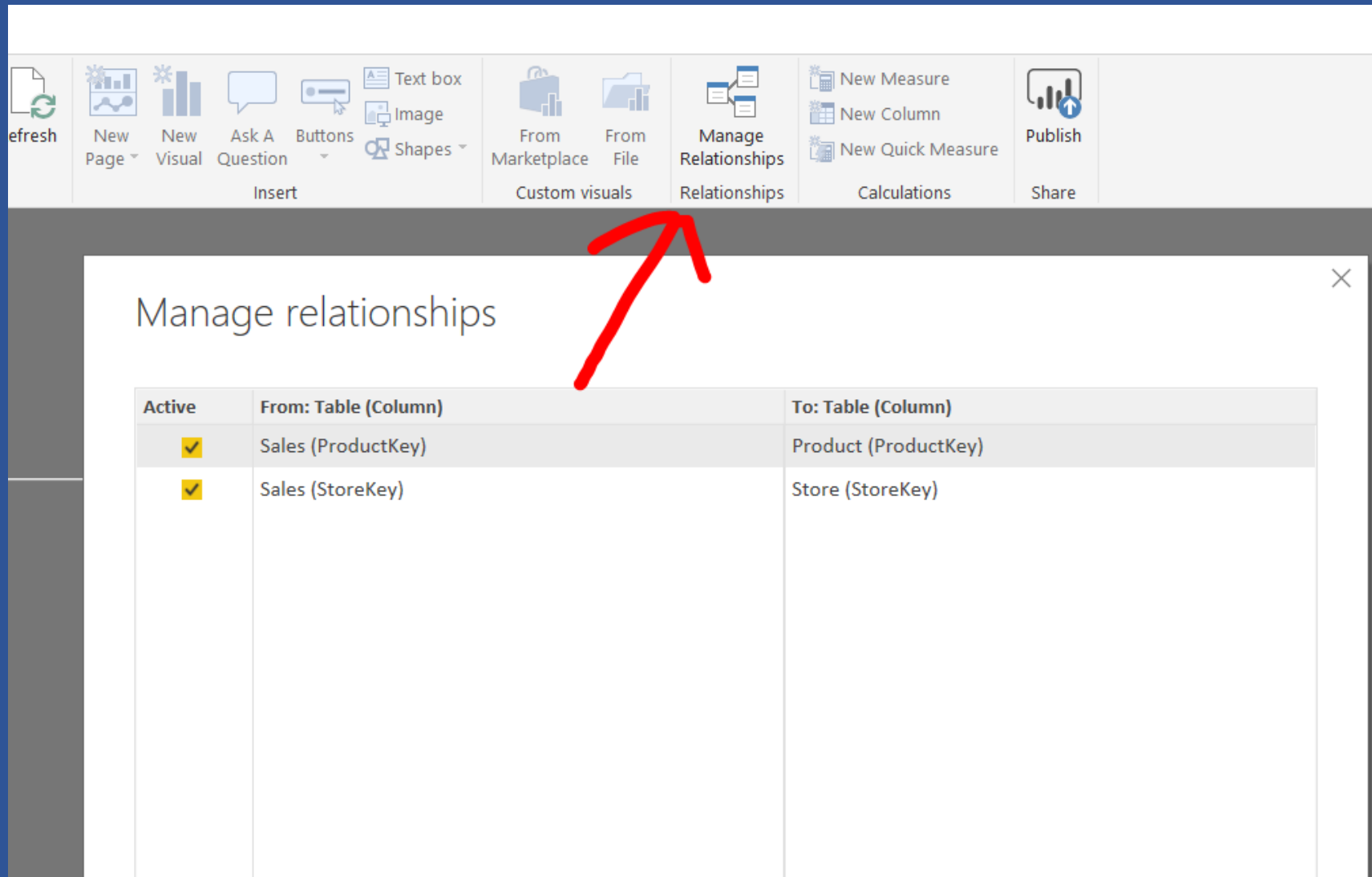
Microsoft Power BI

View Relationship



Microsoft Power BI

Manage Relationships



The screenshot shows the Microsoft Power BI ribbon with the 'Manage Relationships' button highlighted. A red arrow points from this button to the 'Manage relationships' dialog box. The dialog box contains a table with the following data:


| Active | From: Table (Column) | To: Table (Column) |
|-------------------------------------|----------------------|----------------------|
| <input checked="" type="checkbox"/> | Sales (ProductKey) | Product (ProductKey) |
| <input checked="" type="checkbox"/> | Sales (StoreKey) | Store (StoreKey) |

Microsoft Power BI

New...

Manage relationships ×

| Active | From: Table (Column) | To: Table (Column) |
|-------------------------------------|----------------------|----------------------|
| <input checked="" type="checkbox"/> | Sales (ProductKey) | Product (ProductKey) |
| <input checked="" type="checkbox"/> | Sales (StoreKey) | Store (StoreKey) |



New... Autodetect... Edit... Delete

Close

Microsoft Power BI

Set relation between Sales and Calendar

Create relationship

Select tables and columns that are related.

Sales

| SalesKey | StoreKey | channelKey | ProductKey | PromotionKey | DateKey | DiscountAmount | D |
|----------|----------|------------|------------|--------------|----------------------|----------------|---|
| 1 | 156 | 1 | 122 | 2 | 1/1/2011 12:00:00 AM | 0 | |
| 1 | 123 | 1 | 124 | 2 | 1/1/2011 12:00:00 AM | 0 | |
| 1 | 85 | 1 | 154 | 2 | 1/1/2011 12:00:00 AM | 0 | |

Calendar

| DateKey | DayOfMonth | DayOfWeekName | MonthName | MonthOfYear | QuarterOfYear | Year |
|-----------------------|------------|---------------|-----------|-------------|---------------|------|
| 7/3/2005 12:00:00 AM | 3 | Sunday | July | 7 | 3 | 2005 |
| 7/10/2005 12:00:00 AM | 10 | Sunday | July | 7 | 3 | 2005 |
| 7/17/2005 12:00:00 AM | 17 | Sunday | July | 7 | 3 | 2005 |

Cardinality

Many to one (*:1)

Cross filter direction

Single

☒ Make this relationship active

☐ Assume referential integrity

☐ Apply security filter in both directions

OK

Cancel

Microsoft Power BI

Notice new relationship / Close

[illegible]

New...

Autodetect...

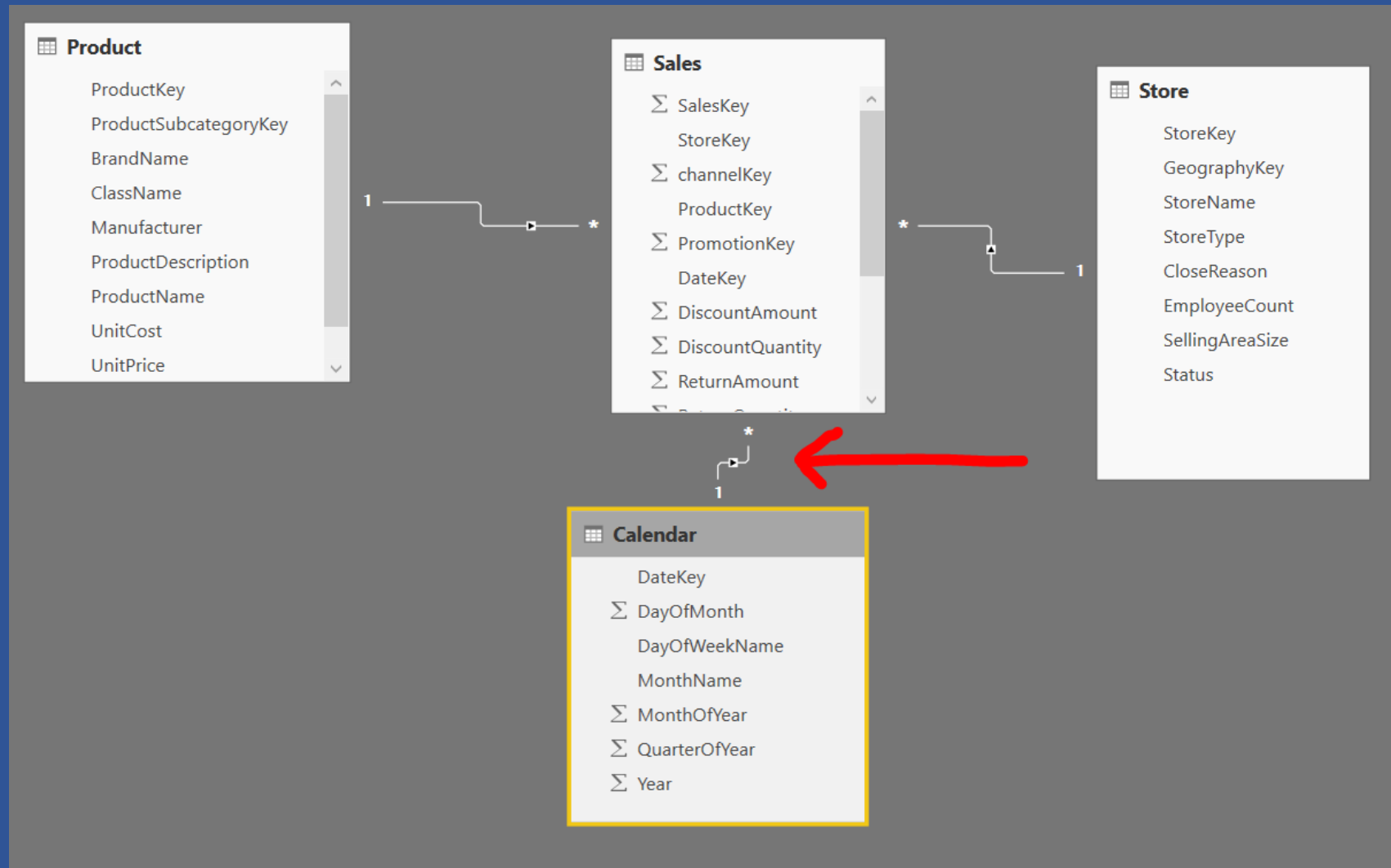
Edit...

Delete

Close

Microsoft Power BI

Final Result



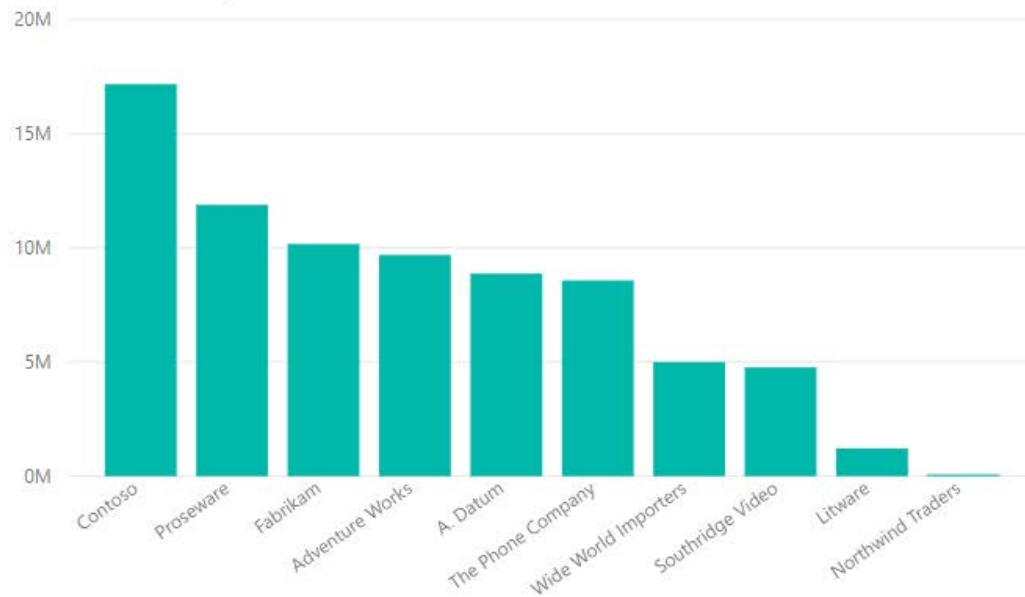
Microsoft Power BI

Exercise

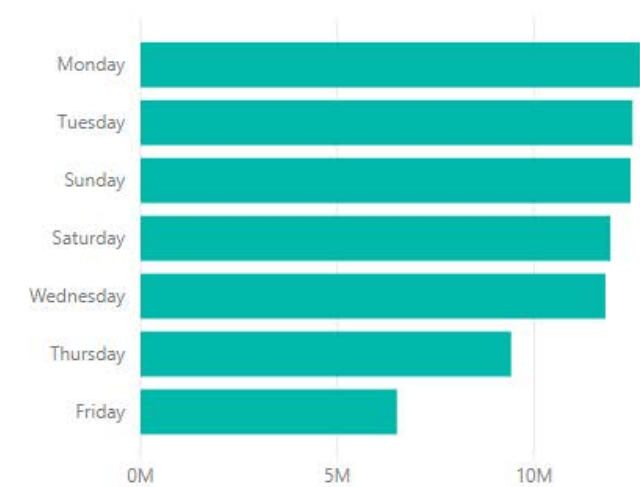
1. New
2. Repeat all steps
3. Create Report

Microsoft Power BI

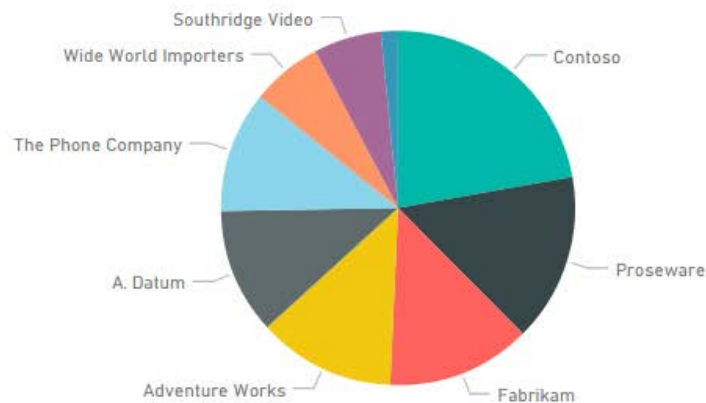
SalesAmount by BrandName



SalesAmount by DayOfWeekName



SalesAmount by BrandName



SalesQuantity by StoreType

