**Assignment 3:**

**Analyzing Data with Power Pivot & DAX**

Using the **FoodMart\_Data\_Model**workbook, complete the following.

**1)** In the **Store\_Lookup** table, create a new calculated column named *days\_since\_opening* to calculate the number of days since the store opened (***hint:****use the TODAY() function and subtract the date from the****first\_opened\_date****column*)

* Use the formatting tools in the **Home**tab to format as a whole number, with a thousands separator (***Data Type:****Decimal Number,****Format:****Whole number*)
* Which store opened first? Which opened most recently?

**2)**Update the formula in #1 to calculate the number of days since the last remodel date, rather than the store opening date, and rename the column *days\_since\_remodel*.

* Which store was remodeled most recently?

**3)** From the Power Pivot tab, create a new measure assigned to the **Returns** table named **Quantity Returned**, which sums the *quantity* column from the **Returns** data table (*format as whole number, with thousands separator*)

* Update the PivotTable layout to show **Quantity Returned** by *store\_country*as **row labels**. What was the total quantity of returned products from stores in Canada?
* Pull *product\_brand* into the pivot as additional **row labels**. What was the total quantity of "Best Choice" products returned in stores from Mexico?
* Replace *product\_brand* with *yearly\_income* from the **Customer\_Lookup** table. What do you notice about the **Quantity Returned** values? Why is that happening?

**4)** Update the PivotTable layout to just show **Quantity Returned** by *product\_brand* (as row labels), and adda filter for ***store\_country* = Canada**

* You should see a **Quantity Returned** value of **3** for "Black Tie" products in Canada
* **Replicate each step of the measure calculation** for that cell by actually filtering the related tables in the data model, and confirm that the value shown in the Data View calculation pane matches the pivot

**ANSWERS:**

**1a)** *See image below:*

A screenshot of a computer

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**1b) *Store #22****(Walla Walla, WA) opened first,****Store #4****(Camacho, Zacatecas) opened most recently*

**2a)** *See image below:*

A screenshot of a computer

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**2b)** ***Store #13****(Salem, OR)*

**3)** *SUM(Returns[quantity])*

**3a)** ***541***

**3b) *39***

**3c)** *The Quantity Returned measure returns repeating values for every row, because there is no relationship between the****Returns****data table and the****Customer\_Lookup****table*

**4)** *N/A*