# Lab 1 Data Import & Transformation Instructions

**Lab Objectives**

**Time: 30 Min**

1. Import the Power Cycle data files using the Folder connector for the sales transaction by country and the Excel and csv flat file connector for the supporting data files
2. Normalize the data tables by creating a **Reseller** dimension table using the table duplication and table merging feature in Power Query editor
3. Create an ID name **ResellerID** using an index column that can be used to connect the **Reseller** table in the data model.
4. Preform a table Merge and create a **ResellerID** in the **Sales by Country Table**
5. Using Power Query perform a text transformation splitting the **City** and **State** columns into individual columns in the **Reseller** table.

**Lab steps**

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| **1) Import Lab data files**  Import Lab files using the text/csv connector and the Folder connector for the files in the **Country files** folder you will need to use the folder connector |  |
| Select combined and load to import all csv files from the folder into power query |  |
| **Import the following csv files.**   * Product-Category * Product Sub-Category * Product * Sale Region * Sales By Country Files * Salesperson * Power Cycle Sales Target |  |
| Scan through all tables and ensure that the data fields are classified correctly.   * Change date/time fields to Date only * Remove the Source name column as it is not a required column for any analysis | Clip Art X |
| **2) Creating a Reseller Dimension table**  Create The Reseller table by selecting **the Sales by Country table** then right-click and select duplicate |  |
| From the **Home Tab** select choose Columns and ensure that the following fields are selected from the list.   1. Reseller Business Type 2. Reseller 3. Reseller CityState 4. ResellerCountry |  |
| * On you keyboard select Ctrl+A to select the entire table. * **From the Home Tab** select **Remove Rows** and **Remove Duplicated** |  |
| **3) Create a Reseller ID Index column**   * From the **Add Column** tab select **Index Column** with the Index starting from 1 * Right-click on the new Index column and Rename the Index Column to **ResellerID** |  |
| **4) Merging Tables**   * From the **Home** tab select **Merge Queries** from the dropdown * Right-click on the new Index column and Rename the Index Column to **Reseller Key** * The **Sales by Country** table should already be selected at the top and for the table that you are merging from select the **Reseller** table from the dropdown list. * You will need to ensure that these table are connected by the Reseller name. Select the Reseller Column in both tables |  |
| * You can now remove the following rows from the **Sales by Country** table   -Reseller Business Type  -Reseller  -Reseller CityState  -ResellerCountry   * From the new **Reseller.1** Column you will now be able to expand the table records by selecting the expansion arrows in the column * Select only the **ResellerID** and uncheck the “use original column name as prefix option” |  |
| **5) Column Splitting**   * Going back to the Reseller table you will need to split out the State name from the city so that they are separate columns, respectively. * From the **Home** tab select **Split Column** option -> **By Delimiter** |  |
| * From the menu option you will need to ensure that the split at is set to each occurrence * In the advanced options the number of columns to split should be set to 2 and the split into should be columns * Re-Name the columns as followed.   Reseller CityState.1 -> City  Reseller CityState.2 -> State |  |
| **END** |  |