**Report 2 – Actual versus Predicted Revenue for Couches and Sofas**

Get a list of **PID** in category “Couches and Sofas”

For each **PID**:

Get the list of **discounted dates**

For each **discounted date**:

Get the **Sales Qty** for this PID for this date

Get the **Discounted Price**, **Retail Price** for this **PID** and **date**

Calculate Actual Revenue as **Discounted Price** \* **Sales Qty**

Calculated Projected Qty as **Sales Qty**\*0.75

Calculate Projected Revenue as **Retail Price** \* **Projected Qty**

Sum up the Actual Revenue, Projected Revenue, Sales Qty, Projected Qty

Calculate Revenue Difference as Actual Revenue – Projected Revenue

Display **PID**, **Product Name**, **Retail Price**, **Sales Qty,** Actual Revenue, Predicted Qty, Projected Revenue

Order by Diff Desc

**Report 6: Revenue by population:**

Get list of all **City Names** and their **population**

For each **City Name:**  
 Assign Each **city** to a population category using condition\*\*

For each population category:

Get the list of **cities** for that category

For each **city:**

Get the list of stores in the city

For each **Store:**

Get the total sales by **PID** by date  
 For each **PID**:

If the **sales** happed on a discount date:

Then Revenue is **Sales**\* **Discount price**  
 Else:

Revenue is **Sales**\* **Retail price**

Sum up revenue by year

Sum up annual revenues for this category

\*\* The categories for city size are: Small (population <3,700,000), Medium (population >=3,700,000 and <6,700,000), Large (population >=6,700,000 and <9,000,000) and Extra Large (population >=9,000,000).