# **Python Assignment Question**

Use the **Superstore Top Customers** excel file which contains the input dataset for this exercise.

A. From the data find out for each subcategory of products for each Region on a yearly Basis:

1. Profit as % of Sales – Profit Margin
2. Shipping cost as % of Sales – Shipment cost%

For Eg. Profit Margin for Region – Canada in Subcategory – Accessories for 2012 = 12.5%

Output the data in a table with following format:



B. Calculate the following from the resultant output of A:

1. Does Shipping cost affect Profit ?

* Draw yearly profit Margin trend (graph) for all line items where Shipment cost% is >10%
* Draw yearly profit Margin trend (graph) for all line items where Shipment cost% is < 10%

C. Find the following from the original Dataset

1. Find most Profitable Sub-category Product for each Region for each year
2. Find highest Shipment cost Sub-category product for each Region for each year
3. Find most profitable Region for each year
4. Find most profitable year for the company
5. Find Busiest Month (Most number of products Shipped) for each sub-category for each year

Submit the python code (Jupyter notebook) which executes all the steps above along with output of every question displayed.