**Raw Codes for SAS Retail Analysis**

\* Step 1: Import data by name of Retail\_Analysis \*

FILENAME REFFILE '/folders/myfolders/Lessonwise\_Datasets\_and\_SAS\_Installation/Retail\_Analysis.xlsx';

PROC IMPORT DATAFILE=REFFILE

DBMS=XLSX

OUT=WORK.Retail\_Analysis;

GETNAMES=YES;

RUN;

PROC CONTENTS DATA=WORK.Retail\_Analysis;

RUN;

PROC PRINT DATA=Retail\_Analysis;

RUN;

/\* Data Preparation \*/

/\* Step 2: Create a new variable Total\_Sales = sales\*quantity\*/

DATA Retail\_Analysis;

set Retail\_Analysis;

Total\_Sales = sales\*quantity;

run;

/\* Step 3: Now predict total\_sales \*/

PROC REG DATA=Retail\_Analysis;

MODEL Total\_Sales= Quantity Discount Profit Shipping\_Cost;

run;

/\* Step 4 \*/:

PROC REG DATA=Retail\_Analysis;

MODEL Total\_Sales= Quantity Discount Profit ;

run;

/\* Step 5: Discount is insignificant in the results. Drop discount and rerun model \*/

/\* Below model if final model with quantity and profit as significant variables

and Adj Rsquare as .88 i.e 88% accuracy\*/

PROC REG DATA=Retail\_Analysis;

MODEL Total\_Sales= Quantity Profit ;

run;

PROC REG DATA=Retail\_Analysis;

MODEL Total\_Sales= Quantity Profit ;

output out = \_SalesPrediction p=Predicted\_Total\_Sales;

run;

======================================PRODUCT 1==================================

FILENAME REFFILE '/folders/myfolders/Lessonwise\_Datasets\_and\_SAS\_Installation/Retail\_Analysis.xlsx';

PROC IMPORT DATAFILE=REFFILE

DBMS=XLSX

OUT=WORK.Retail\_Analysis;

GETNAMES=YES;

RUN;

PROC PRINT DATA=Retail\_Analysis;

RUN;

DATA WORK.RETAIL\_ANALYSIS\_Product1;

SET Retail\_Analysis;

WHERE Products = 'Product1';

RUN;

DATA RETAIL\_ANALYSIS\_Product1;

SET RETAIL\_ANALYSIS\_Product1;

Total\_Sales\_Product1 = sales\*quantity;

run;

PROC REG DATA=RETAIL\_ANALYSIS\_Product1;

MODEL Total\_Sales\_Product1 = Quantity Profit ;

run;