

Assignment - 7

## Data Modelling

**Objective** – Power BI Desktop, Cloud Service and End to End Workflow

**Use Case** – Import list of the Car Sale's Data

**Source** – CarSales\_TablesNew

**Analytics** – Generating data as per the requirement

**Report/Dashboard** – Car Sales

- Create a new Date Table using DAX.
- Create a new measure to find the quarterly sales.
- Create a new measure to find the yearly sales.
- Create a new table called Fact\_Sales containing the data as follows –

SalePrice	CostPrice	SpareParts	LaborCost	TotalCost	InvoiceDate
\$1,10,000	125000	1950	752	122298	02 December 2013
\$44,000	25000	1950	486	22564	01 January 2012
\$45,000	37500	1950	486	35064	01 February 2012
\$39,500	25000	1950	486	22564	01 March 2012
\$44,000	37500	1950	486	35064	01 April 2012
\$44,000	25000	1950	486	22564	01 May 2012
\$39,500	37500	1950	486	35064	01 June 2012
\$44,000	25000	1950	486	22564	01 July 2012
\$44,000	37500	1950	987	34563	02 February 2013
\$39,500	37500	1950	987	34563	02 June 2013
\$44,000	25000	1950	987	22063	02 January 2013
\$1,10,000	25700	1950	1250	22500	01 August 2012
\$39,500	25000	1950	987	22063	02 March 2013
\$1,10,000	37500	1950	987	34563	02 April 2013
\$41,250	25700	1950	750	23000	02 March 2013

This is just snapshot of the data, the data present in Fact\_Sales will be huge.

- Adding a Time Dimension –  
Add these columns in the Date Table –

Column Title	Comments
FullYear	Isolates the year as a four digit number
Quarter	Displays the current quarter in short form
QuarterNumber	Displays the number of the current quarter. This is essentially used as a sort by column
MonthFull	Displays the full name of the month
MonthNumber	Isolates the number of the month in the year as one or two digits

The Date table output should be as follows with column title as above –

DateKey ▼	Year ▼	MonthNum ▼	MonthFull ▼	MonthAbbr ▼	QuarterNum ▼	QuarterFull ▼	QuarterAbbr ▼
01-01-2012	2012	1	January	Jan	1	Quarter 1	Q1
02-01-2012	2012	1	January	Jan	1	Quarter 1	Q1
03-01-2012	2012	1	January	Jan	1	Quarter 1	Q1
04-01-2012	2012	1	January	Jan	1	Quarter 1	Q1
05-01-2012	2012	1	January	Jan	1	Quarter 1	Q1
06-01-2012	2012	1	January	Jan	1	Quarter 1	Q1
07-01-2012	2012	1	January	Jan	1	Quarter 1	Q1
08-01-2012	2012	1	January	Jan	1	Quarter 1	Q1
09-01-2012	2012	1	January	Jan	1	Quarter 1	Q1
10-01-2012	2012	1	January	Jan	1	Quarter 1	Q1
11-01-2012	2012	1	January	Jan	1	Quarter 1	Q1
12-01-2012	2012	1	January	Jan	1	Quarter 1	Q1
13-01-2012	2012	1	January	Jan	1	Quarter 1	Q1
14-01-2012	2012	1	January	Jan	1	Quarter 1	Q1
15-01-2012	2012	1	January	Jan	1	Quarter 1	Q1

- Make manual connections in the data model wherever required.

**Result** – Creating new measures and columns using DAX to calculate the values and building an accurate data model.