DBW624 – Assignment 2
Physical Model and Sample Data

Based off of the "approved" Logical Data Model in Assignment 1, we are now ready to implement our data warehouse.

In this assignment you will physically create:

- **Your database**
- **Fact table**
- **Dimension tables**
- **Definition table**

And load sample data into each.

In a real world, the data in the fact table would be populated through your ETL/ELT scripts, from the OLTP system and other sources. We will not do this here due to time constraints – and the fact that you don't have an OLTP system.

You can make up your data for each of the above tables, however, make sure the data corresponds through the various tables – in other words, referential integrity must hold true. For instance, if you have a store_id of 0001 in the fact table, there should be a corresponding row for that store in the store dimension table. Same for sales people, products, etc.

When building your tables, in particular the fact and dimension tables, make sure you use appropriate referential integrity and basic data integrity capabilities (for example: CONSTRAINTS, NULL-ability, primary/foreign key mappings, DEFAULT values, etc, where appropriate)

Make sure you use intelligent choices for the data types in order to optimize efficiency and space (for instance, VARCHAR vs CHAR, INTEGER vs DECIMAL or FLOAT, etc)

Once you have created the database and associated tables you need to load data into the warehouse.

You should generate a minimum of:

- **100 rows in the FACT table**
- **20 products**
- **5 stores**
- **10 sales people**
- **2 payment options**
- **1 marketing campaign**

You only need to load in 10 records into the definition table so I know you understand the concept.

For this assignment, you should hand in the following:

- **SQL used to create each table**
- **Output of a SELECT statement showing the data in each table**
- **For tables which have >10 rows, showing the first 10 rows is sufficient**

You do NOT need to send me the INSERTs, IMPORTs, LOADs or whatever you are using to load data into the tables. I just need to see a sample of the data from each table with data.

This assignment is worth 6% of your final mark.