# The Complete R Programming Course
# Project 1: Customer Analytics – Insights

## Overview

'Denco Corp' a multi-utility manufacturing company sells finished and semi-finished utility devices and part components to customers across the continent. 'Denco Corp's' customer base consists mainly of small and medium sized businesses that further process the purchased parts before it becomes a consumer end product. 'Denco Corp' relies on repeated sales and higher margin from its customers to expand the business.

## Objectives

'Denco Corp' has a number of loyal customers who contribute to significant portion of revenue. They are looking to expand their business by encouraging loyal customers so as to improve repeated sales and would like to maximize revenue from high value parts. In order to do that, they would like to know:

- Task 1. Who are the most loyal customers?
- Task 2. Which customers contribute the most to their revenue?
- Task 3. What part numbers bring in to significant portion of revenue?
- Task 4. What parts have the highest profit margin?

These are very valid business questions from "Denco Corp's" viewpoint. Your objective is to find answers for 'Denco Corp's' questions using R. The data for this activity is found in following URL:

http://rstatistics.net/wp-content/uploads/2015/08/CustomerPartSales.csv

If only you need some inspiration you will find a sample of the final results here:

http://rstatistics.net/wp-content/uploads/2015/08/Customer_Analytics_Project.xlsx

## Dataset Description

The "CustomerPartSales" has 7583 rows and 6 columns. The data contains the simulated sales transaction data of "Denco Corp" a multi-utility manufacturing company from sales of its parts to various customers. Each row of the transaction data contain the following 5 fields:

- CUSTNAME: Name of the customer
- REGION: Geographic region class of the customer
- PARTNUM: Part number purchased
- REVENUE: Revenue from the transaction
- COST: Cost to company
- MARGIN: Profit margin from the transaction

## Materials

Before you start this assignment, you will need to download and install R and optionally the RStudio IDE.

## Other Considerations

Since this is an activity that 'Denco Corp' might be interested to review periodically in the future, it is wise to add comments to your script where ever possible so the 'future you' can easily understand it.

Also, while writing the script name your variables so later it would be self-evident what they hold. It would be good practice to follow Google's R style guide that makes your code easy to read, share and verify.