

**Convert company excel sheets to relational DB**

Database & SQL Project

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**Overview**

Assume that a startup called Sales\_Rocket wants to saving data they've been collecting on their sales across the nation in a csv file, They found some limitations and decided to create a database for the sales operations. Management has a few questions they’d like easy access to. Your role is to convert this csv files to a relational database using any database management system, The database model should support storing all the provided information,

**Project requirements**

* Create an Entity Relationship Model (ERM) diagram, including a description of the entities, their attributes and relationships
* A database which implements the ERM
* SQL script that will create the whole database along with the constraints and relationships
* Create a function which generates sample data
* Create a function which takes a state and returns the most profitable City in this State and the average annual profit for that city across all years in that city
* Create a function which returns what’s the most profitable product category on average in a specific state across all years
* Create a function which returns what is the most popular product in a specific category in a specific year
* Create a function which returns whats was the most profitable month in each year
* Create a function which returns all the details of the transactions with Profit < 0%
* Create a new boolean column in the customers' table called “is\_top\_customer” it will set to 1 if the customer is one of the company's top customers and to 0 if not
* Create a function to return the total revenue generated per vendor (Manufacturer) every year
* For each product category, the company wants to know what is the total profit per region
* Read - replica database on the same machine. Replication needs to be as real-time as possible
* Automatic backups of the database every 12 hours

**Dataset**

<https://docs.google.com/spreadsheets/d/1TsT_hYAOVuhaD1dBcH2nv7lOLEpB_-qSu_u777S4b9o/edit?usp=sharing>