**Assignment-02**

**Normalization**

Consider there is an online store in US which sells regular home appliances which deliver products to their apartments. This company is also linked with credit card so the customers can buy products. Till now they are maintaining a common spread sheet to refer any detail about the sales. The data is repetitive and there are several dependencies among the attributes. It is incredibly difficult for the store manager to track the information accumulated in the sheet. They also need to report the number of sale that has occurred on a specific date, products details and other stuff.



**Normalization:**

Take a point of view of a database developer and look for normalizing the data into third Normal Form. The data is not atomic and there are partial dependencies and transitive dependencies. Now apply the necessary normalizations on the data as required and transform the data into the third normal form. If there are any attributes that are necessary, feel free to add them. Provide a best possible solution to the Store.

The below given excel sheet has a list of data that is not normalized. The data consists of order details, customer details, and sales representative details.



Double click the icon of excel to open it.

Note:

For all addresses, in this assignment and future assignments, use the following format unless specifically indicated otherwise:

address\_line1, address\_line2, city, state\_or\_region, postal\_code, country

**To submit your assignment, you are responsible for the following.**

* Rename this given file with your Lastname\_Assignment02.
* Include 3NF normalized excel sheet. Consider one tab in excel sheet as a table. Highlight the primary key attribute cell in yellow color \_\_\_\_ and foreign keys in \_\_\_\_.
* Design the ER diagram with all the normalized entities and relationships and submit it via Screenshot from Lucid chart, ERD plus, or another diagramming tool. Clearly show key attributes, including primary keys and foreign keys, and the relationships between the entities.

Note:

* Do not introduce new surrogate keys as primary keys in the entities in your solution.
* Do not include any composite keys in your solution.
* Attach the excel sheet and diagram screenshot separately in your submission. For the diagram, make sure to add enough of your desktop to ensure the screen is running in your laptop.