PROJECT REPORT 1

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**ABOUT THE PROJECT**

This project describes the data base of ABC Restaurant. ABC restaurant is a food chain company which has stores in many cities. Each store of the company has at least two employees. One is manager and other one is waiter. At each store, many customer order food from the menu and each store order raw materials from different vendors. We have defined the data base model with the help of ER Diagram. This model explains the relationship between different entities. SQL codes are written for creating the tables and populating the data. The description of the ER diagram is given below:

**ER Diagram description:**

**The relationship between Vendor and Purchase order:** The Company purchases material from the vendor. A vendor can receive many or no orders at a time, but each order will be completed by only one vendor.If another vendor compltes the order there must be different order number. So here the relationship type is **mandatory** **one to optional many.**

**The relationship between Purchase order and Store:** A store can place as many orders to a vendor, but at a given time an order will be related to only one branch. So there is **mandatory** **one to optional many.**

**The relationship between Store and Customer order**: A store can receive N number of orders at a time or no order, but each order must be related to only one store. So the relationship here is mandatory **one to optional many relationships.**

**The relationship between Store and Employees:** As it is the policy of the restaurant that it should have at least two employees waiter and manager. Also each employee must be related to one store only. At a time an employee cannot be an employee of two stores. Here the relationship is **mandatory** **one to mandatory many**.

**The relationship between Customer\_order and Menu:** The relationship between customer order and menu is **many to many**. As customer order can have many items from the menu. And one item can be in different orders. To simplify this we have created an **associative entity** named as **item\_order.** This entity contains primary keys from both the customer\_order entity and menu entity.