**Mini Project**

**Electric Store Management System**

1. **Functional Requirements:**

* This database is about electric store.
* It gives us information about customers such as customer name, address, phone number, etc.
* It also gives information about the store’s staffs, their roles in the store, their phone number, salary, date of joining, etc.
* It gives idea about product’s stock, their selling price, their unique SKU, etc.
* From this database, we can fetch bill details like which customer bought which product on which date, how much quantity of product he purchased, what is the amount received by the store by a particular customer or within a date range, etc.
* It also gives idea about total sales done by store in a given date range.
* It gives idea about shipping details of products like dispatch date, delivery date and shipping status.

**3) ER to Relational Model:**

* Our ER diagram has strong entity sets and relationship sets.
* Strong entity sets can be directly converted to relations.
* Relationship sets can be converted into relations. But entity with ‘many’ relations will have their primary keys as primary keys of this new relation. And rest of the attributes will be the same of relationship set.
* From 5 entity sets we will get 9 relations.
* Separate relations will be created for multivalued attributes.
* Obtained relations:

1. customer (cid, fname, lname, gender, house\_no, street, city, cust\_type)
2. customer\_contact (cid, phone\_number (FK))
3. staff (sid, fname, lname, salary, dob, date\_of\_joining, gender, staff\_type)
4. staff\_contact (sid, phone\_number (FK))
5. product (pid, pname, brand, avl\_qty, cost, sell\_price)
6. bill (bid, date\_of\_purchase, qty\_purchased)
7. shipper (sh\_id, shipper\_name)
8. shipper\_contact (sh\_id (FK), phone\_number)
9. ships (bid (FK), sh\_id (FK), status, dispatch\_date, delivery\_date)