Group -14
Members- 2020120{53-56}, 2020180{27,28}
Database Management Project

Title:

- Database for managing the warehouse part of the online retail
  Business.

Scope of Database:

- Our job is to manage the data regarding the storage and shipment of the goods across many warehouses and distribution centres.
- We'll be dealing with the storage of incoming goods from suppliers and delivery of those goods, i.e. from suppliers to warehouses to distribution centres and from distribution centres to customer.
- This database consists of data regarding:
    1. Supplier – for supplying goods to warehouse
    2. Warehouse – to store goods temporarily.
    3. Distribution centre – last point after which orders are delivered   individually to the customer.
    4. Customer – Receiving/placing orders.
- We'll not be dealing with the data regarding the production of the goods.

Supplier → Warehouse → Distribution centre → Customer
| ──────────────── our scope ──────────────── |

Description/Requirements:

- Warehouses will have unique warehouse ID, name, capacity, address.
- Every Distribution centre will be connected to a warehouse and will be identified by unique ID. It will also have name and address.
- Every city will have one warehouse and multiple distribution centres.
- Every city will have its unique ID and name.
- One warehouse in a city will be connected to all the distribution centres in the city and all distribution centres will be connected to the warehouse in that very city.
- Employees will have unique id, fname, lname, dob, contact number.
- Every employee works for any one warehouse or distribution centre, but a warehouse or distribution centre can have more than one employee.
- Employees will have a manager. Manager is also a type of employee who manages more than one employee.
- Every warehouse as well as distribution centre will have a manager.
- Items will have unique item ID, cost/item, category, quantity.
- Every warehouse or distribution centre will also have details about quantity of each item stored.
- A supplier will have a unique supplier ID, name and contact number.

- A supplier can supply more than one item, but each item will be supplied by only one supplier.
- A supplier can supply to more than one warehouse. A warehouse can accept supplies from multiple suppliers.
- Customer will have unique customer ID, name, contact number, address, order ID.
- A single customer can place multiple orders at a time.
- Orders will have the information like unique order ID, order date, delivery date, quantity, item ID, total cost(quantity*cost/item), payment details(PAID/UNPAID).
- Customer has got two options to pay in cash or bank transfer.
- Payment details will also be having transaction id, date, amount. If customer wishes to pay online/bank transfer.
- Transport details corresponding to different orders will be stored.
- Transport will have unique ID, vehicle number, pickup and delivery address.

Queries:
- Show the list of items supplied by a particular supplier.
- Show the quantity of a particular item at a warehouse.
- List all employees working at a given establishment.
- List of employees under a particular manager.
- List the distribution centres which are in a given city.
- Fetch details of a given order.
- List top 3 distribution centres those who have delivered the most items.
- Show all the orders where payment detail is 'Unpaid'.
- Retrieve all the orders and payment details for the date '12-12-2019'.
- Given an item show the details of the supplier.
- Show all the items with cost/item more than a particular amount.
- Reproduce the result of customer placing highest number of orders.
- Fetch transportation details for a particular order.