

DBMS LAB

Assignment No – 5

➤ *Write the SQL commands to create the following relational schemas:*

Customer (cust_id, cust_name, annual_revenue, cust_type)

Cust_id must be between 100 and 10,000.

Cust_type must be 'MANUFACTURER', 'WHOLESALE', or 'RETAILER'.

Shipment (shipment_no, cust_id, weight, truck_no, destination, ship_date)

Foreign key: cust_id references customer on delete cascade, truck_no references truck on delete set null, destination references city.

Weight must be under 1000.

Truck (truck_no, driver_name)

City (city_name, population)

➤ *Express the following queries in SQL:*

- 1) Give names of customer who have sent packages (shipments) to Kolkata, Chennai and Mumbai. *(You have to solve this problem using set theoretic operation)*
- 2) List the names of the driver who have delivered shipments weighing over 200 pounds.
- 3) Retrieve the maximum and minimum weights of the shipments. Rename the output as Max_Weight and Min_Weight respectively.
- 4) For each customer, what is the average weight of package sent by the customer?
- 5) List the names and populations of cities that have received shipments weighing over 100 pounds.
- 6) List cities that have received shipments from every customer.
- 7) For each city, what is the maximum weight of a package sent to that city?
- 8) List the name and annual revenue of customers whose shipments have been delivered by truck driver 'IQBAL'.
- 9) List drivers who have delivered shipments to every city.
- 10) For each city, with population over 1 million, what is the minimum weight of a package sent to that city.