DBMS LAB 3

Consider the following relations for an Order Processing database application in a company.

- CUSTOMER (CUST #: int, cname: String, city: String)
- ORDER (order #: int, odate: date, cust #: int, ord-Amt: int)
- ITEM (item #: int, unit-price: int)
- ORDER-ITEM (order #: int, item #: int, qty: int)
- WAREHOUSE (warehouse #: int, city: String)
- SHIPMENT (order #: int, warehouse #: int, ship-date: date)
- i) Create the above tables by properly specifying the primary keys and the foreign keys and the Foreign keys.
- ii) Enter at least five tuples for each relation.
- iii) Produce a listing: CUSTNAME, #oforders, AVG_ORDER_AMT, where the middle column is the total numbers of orders by the customer and the last column is the average order amount for that customer.
- iv) List the order# for orders that were shipped from all warehouses that the company has in a specific city.
- v) Demonstrate how you delete item# 10 from the ITEM table and make that field null in the ORDER_ITEM table.

```
DESC Orders;
CREATE TABLE Item(
     item_id int,
  unit price int,
  PRIMARY KEY(item id)
);
DESC Item;
CREATE TABLE Order item(
     order id int,
 item id int,
 qty int,
  FOREIGN KEY(item id) REFERENCES Item(item id) ON DELETE CASCADE,
 FOREIGN KEY(order_id) REFERENCES Orders(order_id) ON DELETE CASCADE
);
DESC Order item;
CREATE TABLE Warehouse(
     warehouse id int,
  city varchar(30),
  PRIMARY KEY(warehouse_id)
);
DESC Warehouse;
CREATE TABLE Shipment(
     order id int,
     warehouse id int,
  shipdate date,
  FOREIGN KEY(order id) REFERENCES ORDERS(order id) ON DELETE
CASCADE,
  FOREIGN KEY(warehouse id) REFERENCES Warehouse(warehouse id) ON
DELETE CASCADE
);
DESC Shipment;
INSERT INTO Customer values(771, 'PUSHPAK', 'BANGALORE');
INSERT INTO Customer values(772, 'SUMAN', 'MUMBAI');
INSERT INTO Customer values(773, 'SOURAV', 'CALICUT');
```

```
INSERT INTO Customer values(774, 'LAILA', 'HYDERABAD');
INSERT INTO Customer values(775, 'FAIZAL', 'BANGALORE');
SELECT* FROM Customer:
INSERT INTO Orders values(11, '2002-01-22', 771, 18000);
INSERT INTO Orders values(12, '2002-07-30', 774, 6000);
INSERT INTO Orders values(13, '2003-04-03', 775, 9000);
INSERT INTO Orders values(14, '2003-11-03', 775, 29000);
INSERT INTO Orders values(15, '2003-12-10', 773, 29000);
INSERT INTO Orders values(16, '2004-08-04', 772, 56000);
INSERT INTO Orders values(17, '2004-09-10', 771, 20000);
INSERT INTO Orders values(18, '2004-11-20', 775, 29000);
INSERT INTO Orders values(19, '2005-02-13', 774, 29000);
INSERT INTO Orders values(20, '2005-10-13', 775, 29000);
SELECT * FROM Orders;
INSERT INTO Item VALUES('5001','503');
INSERT INTO Item VALUES('5002','750');
INSERT INTO Item VALUES('5003','150');
INSERT INTO Item VALUES('5004','600');
INSERT INTO Item VALUES('5005','890');
SELECT * FROM Item;
INSERT INTO Order item VALUES('11','5001','50');
INSERT INTO Order item VALUES('12','5003','20');
INSERT INTO Order item VALUES('13','5002','50');
INSERT INTO Order item VALUES('14','5005','60');
INSERT INTO Order item VALUES('15','5004','90');
INSERT INTO Order item VALUES('16','5001','10');
INSERT INTO Order item VALUES('17','5003','80');
INSERT INTO Order item VALUES('18','5005','50');
INSERT INTO Order item VALUES('19','5002','10');
INSERT INTO Order_item VALUES('20','5004','45');
SELECT * FROM Order item;
INSERT INTO Warehouse VALUES('1','DELHI');
INSERT INTO Warehouse VALUES('2','BOMBAY');
```

INSERT INTO Warehouse VALUES('3', 'CHENNAI');
INSERT INTO Warehouse VALUES('4', 'BANGALORE');

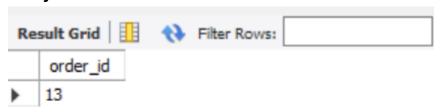
```
INSERT INTO Warehouse VALUES('5', 'BANGALORE');
SELECT * FROM warehouse:
INSERT INTO Shipment VALUES('11','1','2002-02-10');
INSERT INTO Shipment VALUES('12','5','2002-09-10');
INSERT INTO Shipment VALUES('13','2','2003-02-10');
INSERT INTO Shipment VALUES('14','3','2003-12-10');
INSERT INTO Shipment VALUES('15','4','2004-01-19');
SELECT * FROM Shipment;
                       ***********QUERY1*******
Produce a listing: CUSTNAME, #oforders, AVG ORDER AMT, where the middle
column is the total numbers of orders by the customer and the last column is the
average order amount for that
customer.
*/
SELECT cname, count(*), avg(ord amt) FROM Customer right join Orders on
Customer.cust id = Orders.cust id GROUP BY Customer.cname;
                       ***********QUERY2*******
List the order# for orders that were shipped from all warehouses that the company has
in a specific city. */
SELECT order id FROM warehouse AS wh, shipment as sh where
wh.warehouse id=sh.warehouse id and city="Bombay";
                       ***********QUERY2*******
Demonstrate how you delete item# 10 from the ITEM table and make that field null in
the ORDER ITEM table */
SELECT * FROM item;
delete from item where item no = 5005;
```

SELECT * FROM item;

Query 1---

	cname	count(*)	avg(ord_amt)
•	PUSHPA R	< 2	19000.0000
	LAILA	2	17500.0000
	FAIZAL	4	24000.0000
	SOURAV	1	29000.0000
	SUMAN	1	56000.0000
Res	sult 1 ×	Result 2	item 3

Query 2---



Query 3---

