PROGRAM 6: ORDER PROCESSING DATABASE

Consider the following schema for Order Database:

SALESMAN (Salesman_id,Name, City, Commission)

CUSTOMER (Customer_id,Cust_Name, City, Grade, Salesman_id)

ORDERS (Ord_No,Purchase_Amt, Ord_Date, Customer_id, Salesman_id)

Write SQL queries to

1. Count the customers with grades above Bangalore's average.
2. Find the name and numbers of all salesmen who had more than one customer.
3. List all salesmen and indicate those who have and don't have customers in their cities (Use UNION operation.)
4. Create a view that finds the salesman who has the customer with the highest order of a day.
5. Demonstrate the DELETE operation by removing salesmen with id 1000. All his orders must also be deleted.

```
create database order;

use order;

CREATE TABLE SALESMAN(SALESMAN_ID int,NAME VARCHAR (20),CITY
VARCHAR (20),COMMISSION VARCHAR (20),PRIMARY KEY (SALESMAN_ID));

CREATE TABLE CUSTOMER(CUSTOMER_ID INT,CUST_NAME VARCHAR (20),CITY
VARCHAR (20),GRADE INT (3),SALESMAN_ID int,PRIMARY KEY
(CUSTOMER_ID),FOREIGN KEY (SALESMAN_ID) REFERENCES SALESMAN
(SALESMAN_ID) ON DELETE SET NULL ON UPDATE CASCADE);

CREATE TABLE ORDERS(ORD_NO INT,PURCHASE_AMT INT,ORD_DATE
DATE,CUSTOMER_ID INT,SALESMAN_ID INT,PRIMARY KEY (ORD_NO),

FOREIGN KEY (CUSTOMER_ID) REFERENCES CUSTOMER (CUSTOMER_ID) ON
DELETE CASCADE ON UPDATE CASCADE,FOREIGN KEY (SALESMAN_ID)
REFERENCES SALESMAN (SALESMAN_ID) ON DELETE CASCADE ON UPDATE
CASCADE);
```

1. Count the customers with grades above Bangalore's average.

```
SELECT COUNT(DISTINCT CUSTOMER_ID) FROM CUSTOMER WHERE GRADE>

(SELECT AVG(GRADE) FROM CUSTOMER WHERE CITY='BANGALORE');
```

2. Find the name and numbers of all salesmen who had more than one customer.

```
SELECT SALESMAN_ID, NAME FROM SALESMAN S WHERE (SELECT COUNT(*)
FROM CUSTOMER C WHERE C. SALESMAN_ID=S.SALESMAN_ID) > 1;
```

3. List all salesmen and indicate those who have and don't have customers in their cities (Use UNION operation.)

```
SELECT S.SALESMAN_ID, S.NAME, C.CUST_NAME, S.COMMISSION FROM
SALESMAN S, CUSTOMER C WHERE S.CITY=C.CITY UNION;
```

4. Create a view that finds the salesman who has the customer with the highest order of a day.

```
CREATE VIEW V_SALESMAN AS SELECT O.ORD_DATE, S.SALESMAN_ID,
S.NAME FROM SALESMAN S,ORDERS O WHERE S.SALESMAN_ID =
O.SALESMAN_ID AND O.PURCHASE_AMT= (SELECT MAX(PURCHASE_AMT)
FROM ORDERS C WHERE C.ORD_DATE=O.ORD_DATE);
```

5. Demonstrate the DELETE operation by removing salesmen with id 1000. All his orders must also be deleted.

```
DELETE FROM SALESMAN WHERE SALESMAN_ID=1;
```