Program 6 : Order Database
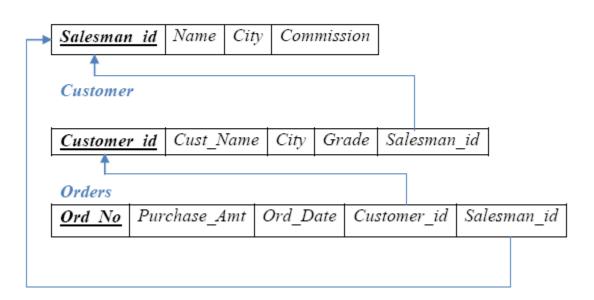
Consider the following schema for Order Database:

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 salesman with id 1000. All his orders must also be deleted.

Schema Diagram

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

SELECT * FROM SALESMAN;

```
SALESMAN_ID NAME                 CITY                 COMMISSION
----------- -------------------- -------------------- --------------------
       1000 JOHN                 BANGALORE            25 %
       2000 RAVI                 BANGALORE            20 %
       3000 KUMAR                MYSORE               15 %
       4000 SMITH                DELHI                30 %
       5000 HARSHA               HYDRABAD             15 %
```

SELECT * FROM CUSTOMER1;

```
CUSTOMER_ID CUST_NAME            CITY                      GRADE SALESMAN_ID
----------- -------------------- -------------------- ----------- -----------
         10 PREETHI              BANGALORE                    100        1000
         11 VIVEK                MANGALORE                    300        1000
         12 BHASKAR              CHENNAI                      400        2000
         13 CHETHAN              BANGALORE                    200        2000
         14 MAMATHA              BANGALORE                    400        3000
```

SELECT * FROM ORDERS;

```
    ORD_NO PURCHASE_AMT ORD_DATE  CUSTOMER_ID SALESMAN_ID
---------- ------------ --------- ----------- -----------
        50         5000 04-MAY-17          10        1000
        51          450 20-JAN-17          10        2000
        52         1000 24-FEB-17          13        2000
        53         3500 13-APR-17          14        3000
        54          550 09-MAR-17          12        2000
```

Program:-

create database orderdb2;
use orderdb2;
create table salesman(
salesman_id varchar(20),
salesman_name varchar(20),
salesman_city varchar(20),
commission varchar(20),
primary key(salesman_id)
);
create table customer(
customer_id varchar(20),
customer_name varchar(20),
customer_city varchar(20),
grade varchar(20),
salesman_id varchar(20),

primary key(customer_id),
foreign key(salesman_id) references salesman(salesman_id) on delete set null);
create table orders(
ord_no int,
purchase_amt double,
ord_date date,
customer_id varchar(20),
salesman_id varchar(20),
foreign key(salesman_id) references salesman(salesman_id) on delete cascade,
foreign key(customer_id) references customer(customer_id) on delete cascade
);
insert into salesman values("1000","JHON","BANGLORE","25%"),
("2000","RAVI","BANGLORE","20%"),
("3000","KUMAR","MYSORE","15%"),
("4000","SMITH","DELHI","30%"),
("5000","HARSHA","HYDRABAD","15%");
select * from salesman;

salesman_id	salesman_name	salesman_city	commission
1000	JHON	BANGLORE	25%
2000	RAVI	BANGLORE	20%
3000	KUMAR	MYSORE	15%
4000	SMITH	DELHI	30%
5000	HARSHA	HYDRABAD	15%
NULL	NULL	NULL	NULL

insert into customer values("10","PREETHI","BANGLORE","100","1000"),
("11","VIVEK","MANGLORE","300","1000"),
("12","BHASKAR","CHENNAI","400","2000"),
("13","CHETHAN","BANGLORE","200","2000"),
("14","MAMTHA","BANGLORE","400","3000");
select * from customer;

customer_id	customer_name	customer_city	grade	salesman_id
10	PREETHI	BANGLORE	100	1000
11	VIVEK	MANGLORE	300	1000
12	BHASKAR	CHENNAI	400	2000
13	CHETHAN	BANGLORE	200	2000
14	MAMTHA	BANGLORE	400	3000
NULL	NULL	NULL	NULL	NULL

insert into orders values("50","5000","17-05-04","10","1000"),
("51","450","17-01-20","10","2000"),
("52","1000","17-02-24","13","2000"),
("53","3500","17-04-13","14","3000"),
("54","550","17-03-09","12","2000");

select * from orders;

ord_no	purchase_amt	ord_date	customer_id	salesman_id
50	5000	2017-05-04	10	1000
51	450	2017-01-20	10	2000
52	1000	2017-02-24	13	2000
53	3500	2017-04-13	14	3000
54	550	2017-03-09	12	2000

select grade,count(distinct customer_id) from customer group by grade having grade > (select avg(grade) from customer where customer_city ="BANGLORE");

grade	count(distinct customer_id)
300	1
400	2

select salesman_id ,salesman_name from salesman S where 1 <(select count(*) from customer where salesman_id = S.salesman_id);

salesman_id	salesman_name
1000	JHON
2000	RAVI
NULL	NULL

select salesman.salesman_id ,salesman_name,customer_name,commission from salesman,customer where salesman_city = customer_city union select salesman_id,salesman_name ,'NO MATCH FOUND',commission from salesman where not salesman_city = any(select customer_city from customer)order by 2 desc;

salesman_id	salesman_name	customer_name	commission
4000	SMITH	NO MATCH FOUND	30%
2000	RAVI	PREETHI	20%
2000	RAVI	CHETHAN	20%
2000	RAVI	MAMTHA	20%
3000	KUMAR	NO MATCH FOUND	15%
1000	JHON	PREETHI	25%
1000	JHON	CHETHAN	25%
1000	JHON	MAMTHA	25%
5000	HARSHA	NO MATCH FOUND	15%

create view best_salesman as select b.ord_date ,a.salesman_id,a.salesman_name from salesman a,orders b where a.salesman_id=b.salesman_id and b.purchase_amt=(select max(purchase_amt) from orders c where c.ord_date=b.ord_date);
select * from best_salesman;

ord_date	salesman_id	salesman_name
2017-05-04	1000	JHON
2017-01-20	2000	RAVI
2017-02-24	2000	RAVI
2017-04-13	3000	KUMAR
2017-03-09	2000	RAVI

delete from salesman where salesman_id = 1000;