

## **DBMS LAB PROGRAM 6(ORDER DATABASE)**

VAIBHAVI PATIL

1BM19CS217

CSE SEC "A"

**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*)

#### **CODE**

```
create database orderdb1;
```

```
use orderdb1;
```

```
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%");
```

```
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");
```

```
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 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

salesman 1 ×

**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

customer 2 ×

**select \* from orders;**

	ord_no	purchase_amt	ord_date	customer_id	salesman_id
▶	50	5000	2004-05-17	10	1000
	51	450	2020-01-17	10	2000
	52	1000	2024-02-17	13	2000
	53	3500	2013-04-17	14	3000
	54	550	2009-03-17	12	2000

orders 3 ×

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

```
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

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

```
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

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

```
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%

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

```
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
▶	2004-05-17	1000	JHON
	2020-01-17	2000	RAVI
	2024-02-17	2000	RAVI
	2013-04-17	3000	KUMAR
	2009-03-17	2000	RAVI

best\_salesman 12 x

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

```
delete from salesman where salesman_id = 1000;
```

```
select * from salesman;
```

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

```
select * from customer;
```

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

**select \* from orders;**

	ord_no	purchase_amt	ord_date	customer_id	salesman_id
►	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