

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)

```
CREATE DATABASE order_database;
```

```
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);
```

```
INSERT INTO SALESMAN VALUES (1, 'JASON','BANGALORE','25 %'),
(2, 'SHYAM','BANGALORE','20 %'),
(3, 'KUMARA','MYSORE','15 %'),
(4, 'SMITHA','DELHI','30 %'),
(5, 'HARISH','HYDERABAD','15%');
INSERT INTO CUSTOMER VALUES (10, 'PREETHI','BANGALORE', 100, 1),
(11, 'VIVEK','MANGALORE', 300, 1),
(12, 'BHASKAR','CHENNAI', 400, 2),
(13, 'CHETAN','BANGALORE', 200, 2),
(14, 'MAMATHA','BANGALORE', 400, 3),
(15,'ANJALI','UDUPI',600,2);
INSERT INTO ORDERS VALUES (50, 5000, '2017-04-04', 10, 1),
(51, 450, '20-01-17', 10, 2),
(52,1000,'24-02-17',13,2),
(53,3500,'13-04-17',14,3),
```

(54, 550, '09-03-17', 12, 2);

SELECT * FROM `customer`

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☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

+ Options

	CUSTOMER_ID	CUST_NAME	CITY	GRADE	SALESMAN_ID
<input type="checkbox"/> Edit Copy Delete	10	PREETHI	BANGALORE	100	1
<input type="checkbox"/> Edit Copy Delete	11	VIVEK	MANGALORE	300	1
<input type="checkbox"/> Edit Copy Delete	12	BHASKAR	CHENNAI	400	2
<input type="checkbox"/> Edit Copy Delete	13	CHETAN	BANGALORE	200	2
<input type="checkbox"/> Edit Copy Delete	14	MAMATHA	BANGALORE	400	3
<input type="checkbox"/> Edit Copy Delete	15	ANJALI	UDUPI	600	2

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Showing rows 0 - 4 (5 total, Query took 0.0005 seconds.)

SELECT * FROM `orders`

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+ Options

	ORD_NO	PURCHASE_AMT	ORD_DATE	CUSTOMER_ID	SALESMAN_ID
<input type="checkbox"/> Edit Copy Delete	50	5000	2017-04-04	10	1
<input type="checkbox"/> Edit Copy Delete	51	450	2020-01-17	10	2
<input type="checkbox"/> Edit Copy Delete	52	1000	2024-02-17	13	2
<input type="checkbox"/> Edit Copy Delete	53	3500	2013-04-17	14	3
<input type="checkbox"/> Edit Copy Delete	54	550	2009-03-17	12	2

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Showing rows 0 - 4 (5 total, Query took 0.0006 seconds.)

SELECT * FROM `salesman`

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	SALESMAN_ID	NAME	CITY	COMMISSION
<input type="checkbox"/> Edit Copy Delete	1	JASON	BANGALORE	25 %
<input type="checkbox"/> Edit Copy Delete	2	SHYAM	BANGALORE	20 %
<input type="checkbox"/> Edit Copy Delete	3	KUMARA	MYSORE	15 %
<input type="checkbox"/> Edit Copy Delete	4	SMITHA	DELHI	30 %
<input type="checkbox"/> Edit Copy Delete	5	HARISH	HYDERABAD	15 %

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Write SQL queries to

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');

Your SQL query has been executed successfully.

```
SELECT COUNT(DISTINCT CUSTOMER_ID) FROM CUSTOMER WHERE GRADE > (SELECT AVG(GRADE) FROM CUSTOMER WHERE CITY='BANGALORE')
```

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COUNT(DISTINCT CUSTOMER_ID)
4

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;

Showing rows 0 - 1 (2 total, Query took 0.0035 seconds.)

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

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☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

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	SALESMAN_ID	NAME
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	1	JASON
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	2	SHYAM

↑ ☐ Check all | With selected: ☐ Edit ☐ Copy ☐ Delete ☐ Export

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 SELECT S.SALESMAN_ID, S.NAME, 'NO MATCH', S.COMMISSION FROM SALESMAN S WHERE CITY NOT IN (SELECT CITY FROM CUSTOMER) ORDER BY 1 ASC;

Showing rows 0 - 8 (9 total, Query took 0.0067 seconds.)

```
SELECT S.SALESMAN_ID, S.NAME, C.CUST_NAME, S.COMMISSION FROM SALESMAN S, CUSTOMER C WHERE S.CITY=C.CITY UNION SELECT S.SALESMAN_ID, S.NAME, 'NO MATCH', S.COMMISSION FROM SALESMAN S WHERE CITY NOT IN (SELECT CITY FROM CUSTOMER) ORDER BY 1 ASC
```

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+ Options

SALESMAN_ID	NAME	CUST_NAME	COMMISSION
1	JASON	PREETHI	25 %
1	JASON	CHETAN	25 %
1	JASON	MAMATHA	25 %
2	SHYAM	PREETHI	20 %
2	SHYAM	CHETAN	20 %
2	SHYAM	MAMATHA	20 %
3	KUMARA	NO MATCH	15 %
4	SMITHA	NO MATCH	30 %
5	HARISH	NO MATCH	15 %

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);
```

Showing rows 0 - 4 (5 total, Query took 0.0008 seconds.)

```
SELECT * FROM `v_salesman`
```

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+ Options

				ORD_DATE	SALESMAN_ID	NAME
<input type="checkbox"/>				2017-04-04	1	JASON
<input type="checkbox"/>				2020-01-17	2	SHYAM
<input type="checkbox"/>				2024-02-17	2	SHYAM
<input type="checkbox"/>				2013-04-17	3	KUMARA
<input type="checkbox"/>				2009-03-17	2	SHYAM

5. Demonstrate the DELETE operation by removing salesman with id 1. All his orders must also be deleted.

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

Show query box

1 row affected. (Query took 0.0129 seconds.)

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

[\[Edit inline\]](#) [\[Edit\]](#) [\[Create PHP code\]](#)