

USN:1BM19CS216

PROGRAM 6: 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.

```
CREATE DATABASE ORDERDATABASE;
USE ORDERDATABASE;
CREATE TABLE SALESMAN(
SALESMANID INT,
SNAME VARCHAR(30),
CITY VARCHAR(30),
COMMISSION VARCHAR(30),
PRIMARY KEY (SALESMANID));
CREATE TABLE CUSTOMER(
CUSTOMERID INT,
SALESMANID INT,
CNAME VARCHAR(30),
CITY VARCHAR(20),
GRADE INT,
PRIMARY KEY (CUSTOMERID),
FOREIGN KEY (SALESMANID) REFERENCES SALESMAN(SALESMANID));
CREATE TABLE ORDERS(
ORDERNO INT,
CUSTOMERID INT,
SALESMANID INT,
PURCHASEAMT INT,
ORDERDATE DATE,
PRIMARY KEY (ORDERNO),
FOREIGN KEY (SALESMANID) REFERENCES SALESMAN(SALESMANID),
FOREIGN KEY (CUSTOMERID) REFERENCES CUSTOMER(CUSTOMERID));
```

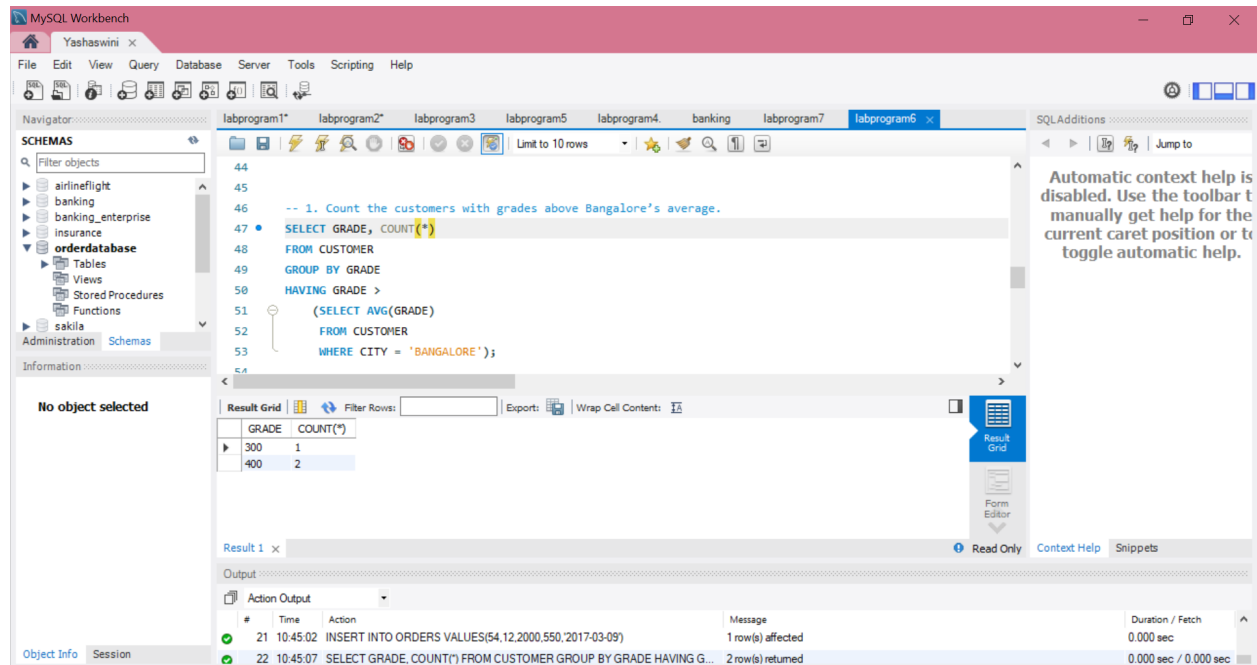
```
INSERT INTO SALESMAN VALUES(1000,'JOHN','BANGALORE','25%');
INSERT INTO SALESMAN VALUES(2000,'RAVI','BANGALORE','20%');
INSERT INTO SALESMAN VALUES(3000,'KUMAR','MYSORE','15%');
INSERT INTO SALESMAN VALUES(4000,'SMITH','DELHI','30%');
INSERT INTO SALESMAN VALUES(5000,'HARSHA','HYDERABAD','15%');
```

```
INSERT INTO CUSTOMER VALUES(10,1000,'PREETHI','BANGALORE',100);
INSERT INTO CUSTOMER VALUES(11,2000,'VIVEK','MANGALORE',300);
INSERT INTO CUSTOMER VALUES(12,2000,'BHASKAR','CHENNAI',400);
INSERT INTO CUSTOMER VALUES(13,3000,'CHETAN','BANGALORE',200);
INSERT INTO CUSTOMER VALUES(14,2000,'MAMTHA','BANGALORE',400);
```

```
INSERT INTO ORDERS VALUES(50,10,1000,5000,'2017-05-04');
INSERT INTO ORDERS VALUES(51,10,2000,450,'2017-01-20');
INSERT INTO ORDERS VALUES(52,13,2000,1000,'2017-02-24');
INSERT INTO ORDERS VALUES(53,14,3000,3500,'2017-04-13');
INSERT INTO ORDERS VALUES(54,12,2000,550,'2017-03-09');
```

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

```
SELECT GRADE, COUNT(*)
FROM CUSTOMER
GROUP BY GRADE
HAVING GRADE >
    (SELECT AVG(GRADE)
     FROM CUSTOMER
     WHERE CITY = 'BANGALORE');
```

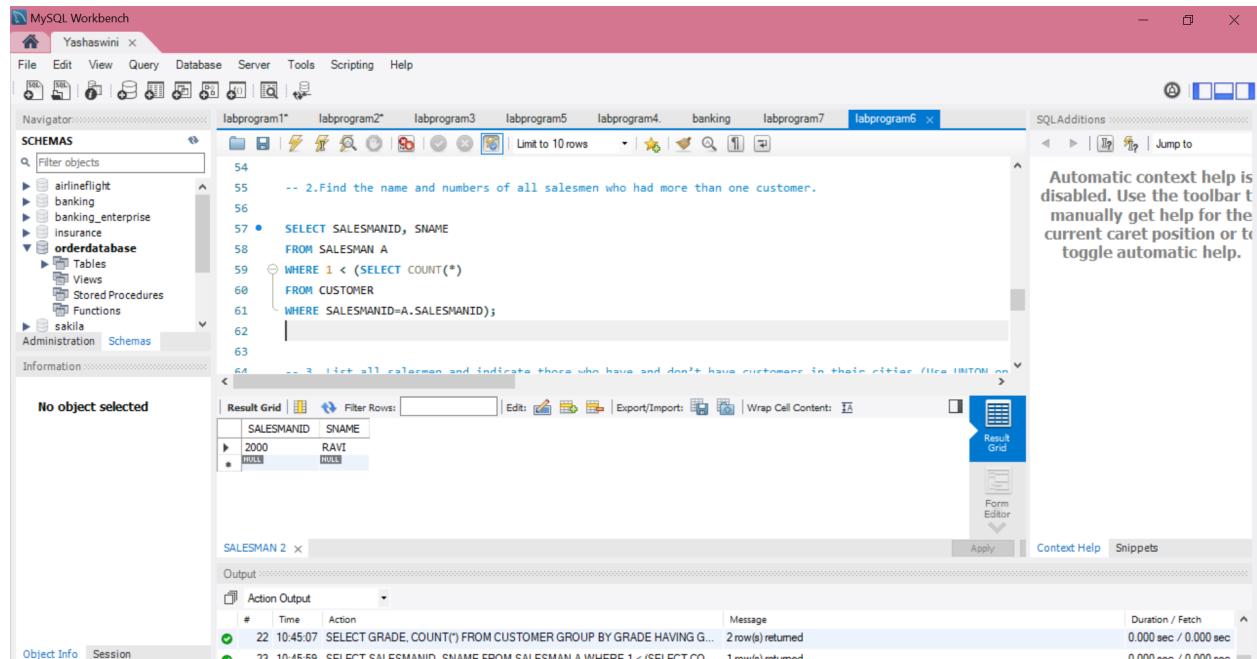


-- 2.Find the name and numbers of all salesmen who had more than one customer.

```

SELECT SALESMANID, SNAME
FROM SALESMAN A
WHERE 1 < (SELECT COUNT(*)
FROM CUSTOMER
WHERE SALESMANID=A.SALESMANID);

```

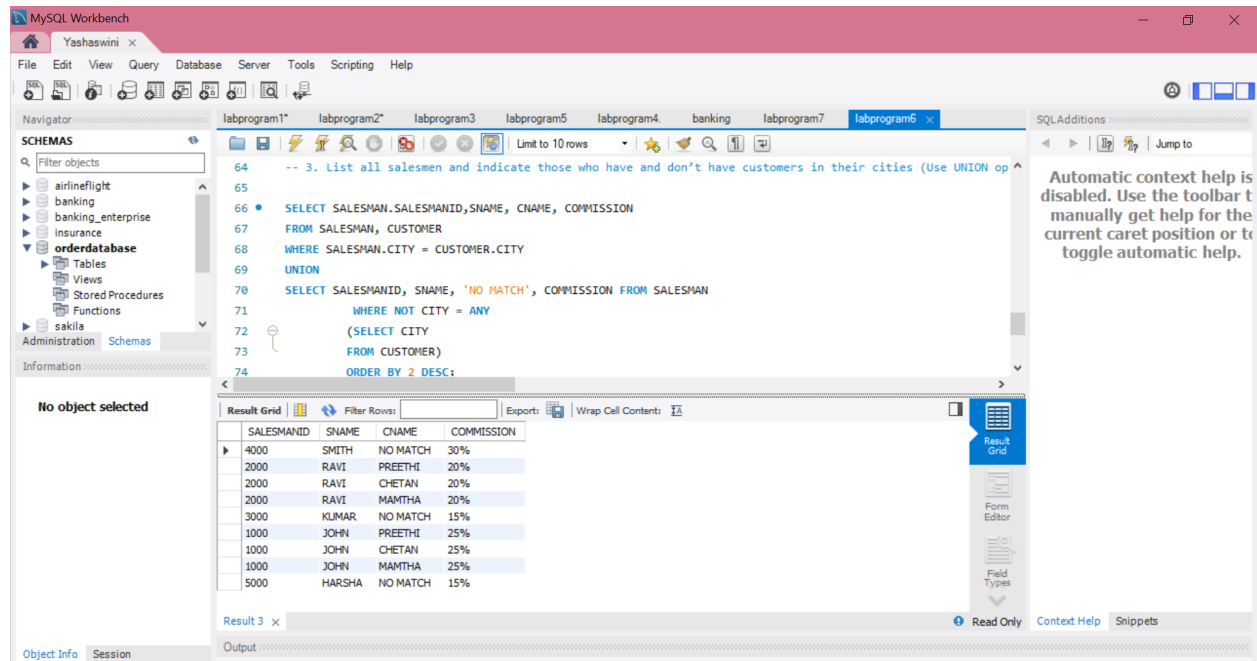


-- 3. List all salesmen and indicate those who have and don't have customers in their cities (Use UNION operation.)

```

SELECT SALESMAN.SALESMANID,SNAME, CNAME, COMMISSION
FROM SALESMAN, CUSTOMER
WHERE SALESMAN.CITY = CUSTOMER.CITY
UNION
SELECT SALESMANID, SNAME, 'NO MATCH', COMMISSION FROM SALESMAN
  WHERE NOT CITY = ANY
    (SELECT CITY
     FROM CUSTOMER)
ORDER BY 2 DESC;

```



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

```
CREATE VIEW VIEWSALESMAN AS
SELECT B.ORDERDATE, A.SALESMANID, A.SNAME
FROM SALESMAN A, ORDERS B
WHERE A.SALESMANID = B.SALESMANID
AND B.PURCHASEAMT=(SELECT MAX (PURCHASEAMT)
FROM ORDERS C
WHERE C.ORDERDATE = B.ORDERDATE);
```

MySQL Workbench

Yashaswini x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

- airlineflight
- banking
- banking_enterprise
- insurance
- orderdatabase
 - Tables
 - Views
 - Stored Procedures
 - Functions
- sakila

Administration Schemas

Information

Schema: orderdatabase

labprogram1* labprogram2* labprogram3 labprogram5 labprogram4 banking labprogram7 labprogram6 x

Limit to 10 rows

```
69 UNION
70 SELECT SALESMANID, SNAME, 'NO MATCH', COMMISSION FROM SALESMAN
71 WHERE NOT CITY = ANY
72 (SELECT CITY
73 FROM CUSTOMER)
74 ORDER BY 2 DESC;
75
76 -- 4. Create a view that finds the salesman who has the customer with the highest order of a day.
77
78 CREATE VIEW VIENSALSMAN AS
79 SELECT B.ORDERDATE, A.SALESMANID, A.SNAME
80 FROM SALESMAN A, ORDERS B
81 WHERE A.SALESMANID = B.SALESMANID
82 AND B.PURCHASEAMT=(SELECT MAX (PURCHASEAMT)
83 FROM ORDERS C
84 WHERE C.ORDERDATE = B.ORDERDATE);
```

SQLAdditions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Context Help Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
23	10:45:59	SELECT SALESMANID, SNAME FROM SALESMAN A WHERE 1 < (SELECT CO...	1 row(s) returned	0.000 sec / 0.000 sec
24	10:46:18	SELECT SALESMAN.SALESMANID, SNAME, CNAME, COMMISSION FROM SAL...	9 row(s) returned	0.015 sec / 0.000 sec