

ASSIGNMENT 3-ADBMS

Submitted by:

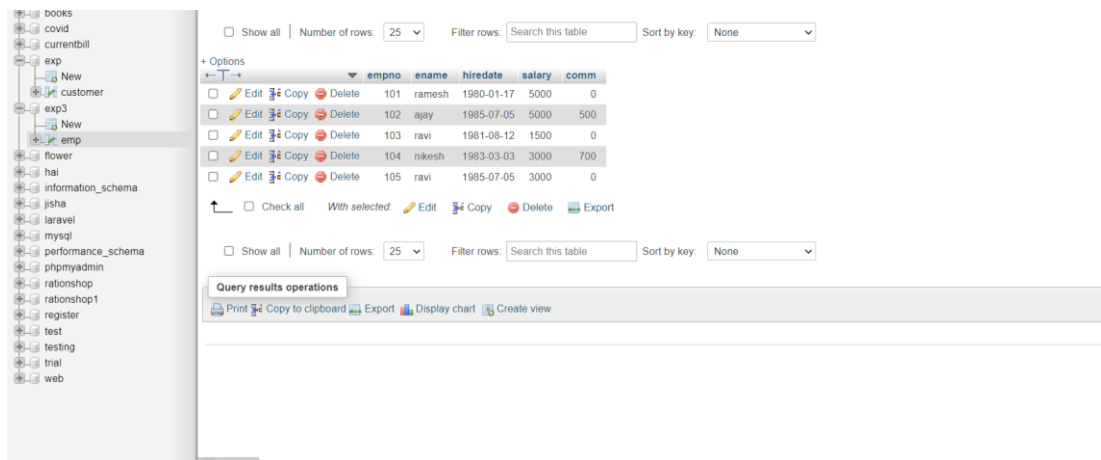
Jisha Chacko

S2RMCA A

ROLLNO:44

1.Create a table emp with attributes empno number(4)as primary key, ename char(10),hiredate, salary, commission

insert 5 rows of data 101 Ramesh 17-Jan-1980 5000 ; 102 Ajay 05-Jul-1985 5000 500; 103 Ravi 12-Aug-1981 1500 ; 104 Nikesh 03-Mar-1983 3000 700; 105 Ravi 05-jul-1985 3000;

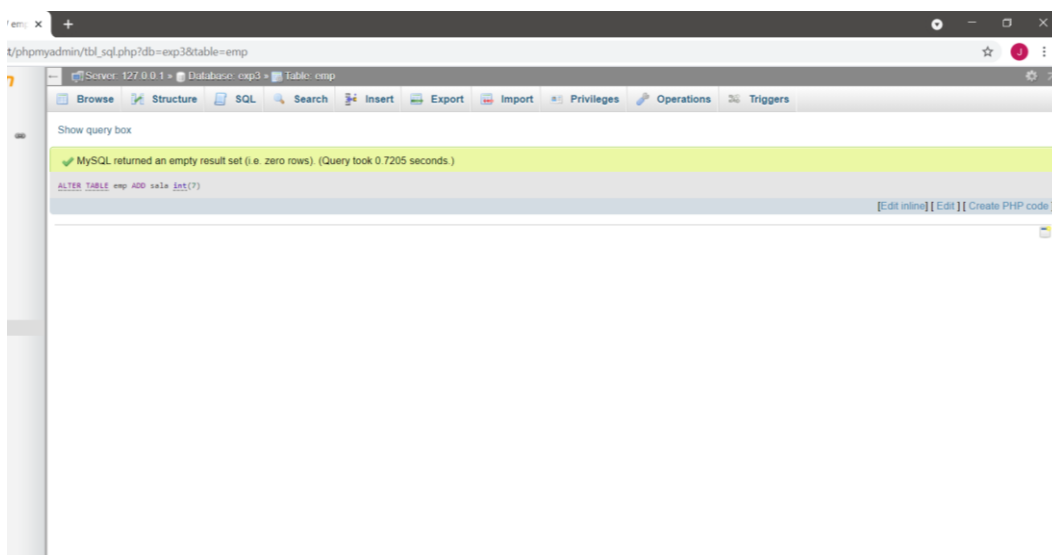


The screenshot shows the phpMyAdmin interface. On the left is a database navigation tree with 'exp3' selected. The main panel displays the 'emp' table structure with columns: empno, ename, hiredate, salary, and comm. Below the structure, the table data is shown as a grid with 5 rows. Each row has action icons (Edit, Copy, Delete) to its left. At the bottom, there is a 'Query results operations' bar with links for Print, Copy to clipboard, Export, Display chart, and Create view.

empno	ename	hiredate	salary	comm
101	ramesh	1980-01-17	5000	0
102	ajay	1985-07-05	5000	500
103	ravi	1981-08-12	1500	0
104	nikesh	1983-03-03	3000	700
105	ravi	1985-07-05	3000	0

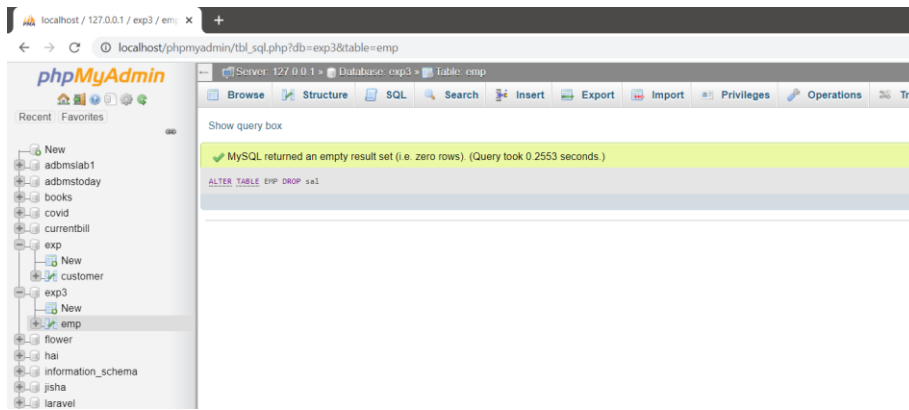
2.Modifying the structure of tables

a.Add new columns: sal number(7,2)



ALTER TABLE EMP ADD SAL INTEGER(7);

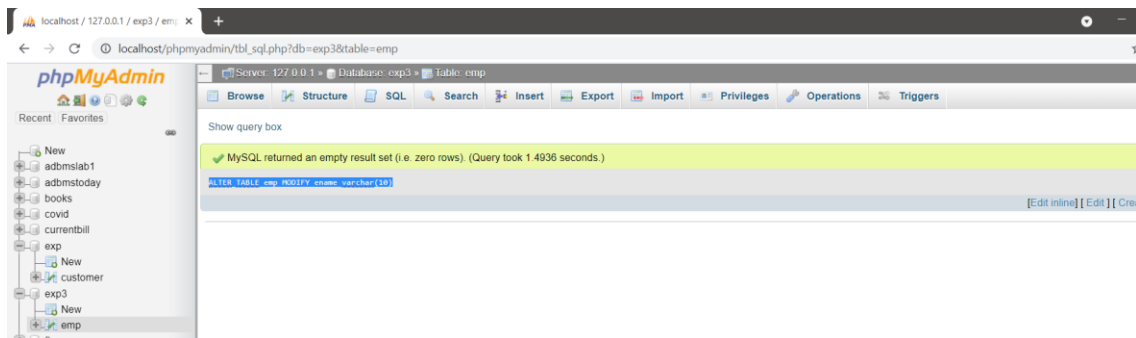
b.Dropping a column from a table: sal



ALTER TABLE EMP DROP sal;

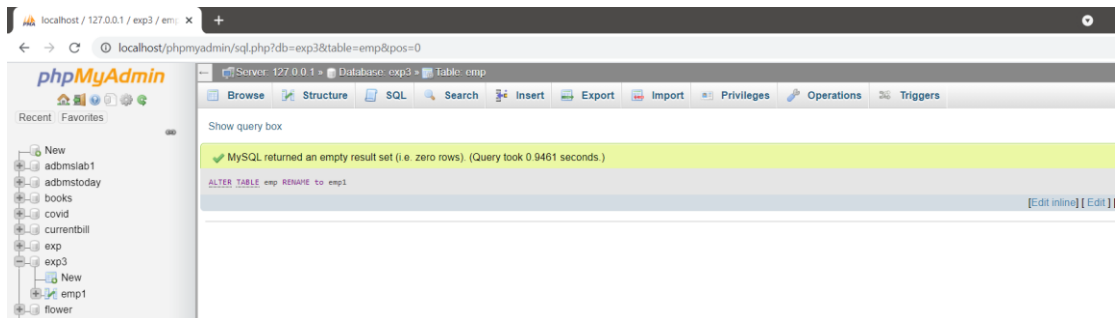
c.Modifying existing column :ename varchar2(15)

c.Modifying existing column :ename varchar2(15);



d.Renaming the tables: emp to emp1

ALTER TABLE emp RENAME to emp1;

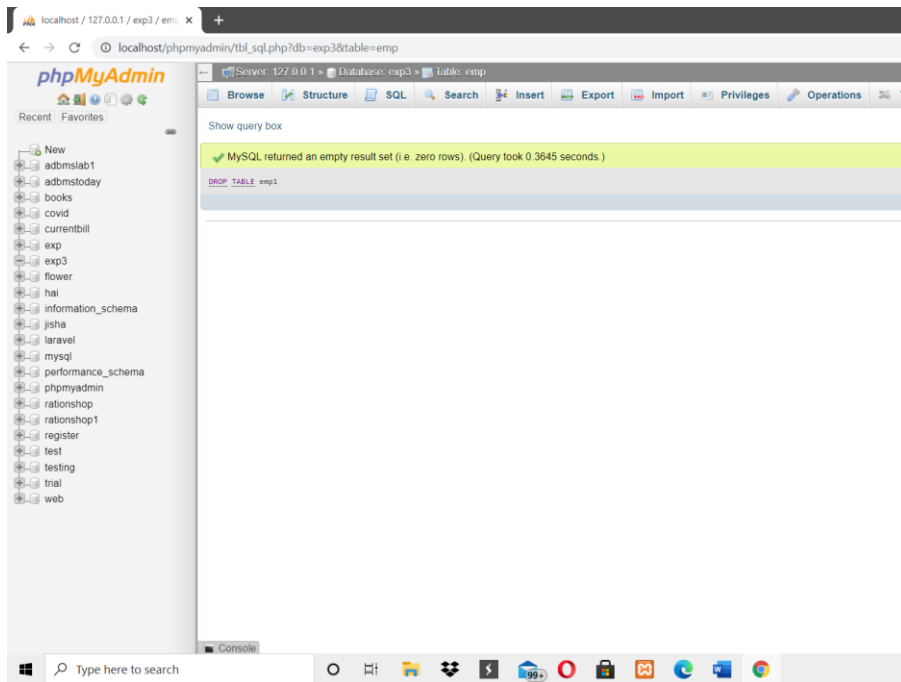


e.truncating the tables:emp1

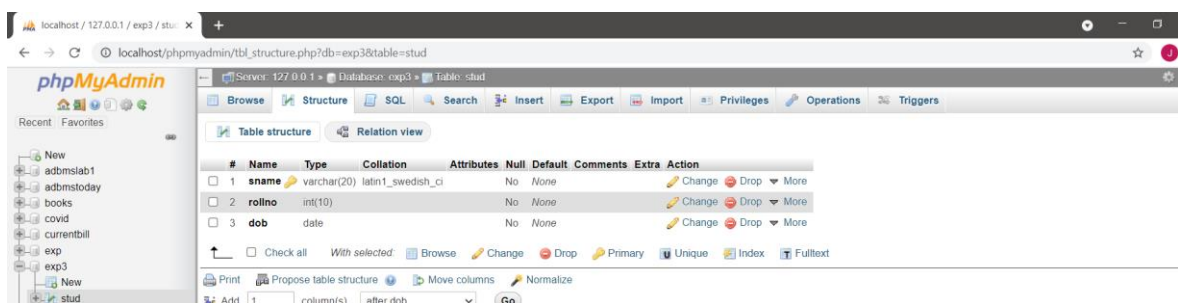
truncate t;

f.Destroying tables:emp

drop table emp1;



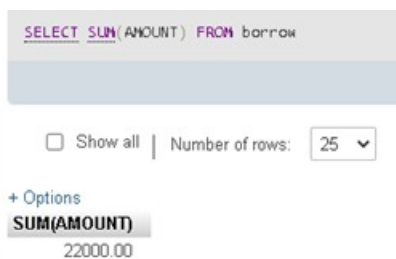
3. Create a table stud with sname varchar2(20) primary key , rollno number(10) not null, dob date not null



EXPERIMENT NO.5 : AGGREGATE FUNCTION

1. List total loan

SELECT SUM (AMOUNT) FROM BORROW;



2. List total deposit

SELECT SUM (AMOUNT) FROM DEPOSIT;

A screenshot of a SQL query result. The query is 'SELECT SUM(AMOUNT) FROM deposit'. Below the query, there is a table with one row showing the sum of amounts as 24200.00. The interface includes a 'Show all' checkbox, a 'Number of rows' dropdown set to 25, and a '+ Options' link.

SUM(AMOUNT)
24200.00

3.List total loan taken from KAROLBAGH branch

SELECT MAX(AMOUNT) FROM BORROW WHERE BNAME ='KAROLBAGH';

A screenshot of a SQL query result. The query is 'SELECT MAX(AMOUNT) FROM borrow WHERE BNAME = 'KAROLBAGH''. Below the query, there is a table with one row showing the maximum amount as NULL. The interface includes a 'Show all' checkbox, a 'Number of rows' dropdown set to 25, a 'Filter rows' dropdown, and a '+ Options' link.

MAX(AMOUNT)
NULL

4.List total deposit of customers having account date later than 1-Jan-96

SELECT SUM(AMOUNT) from deposit where adate>'1995-03-01';

A screenshot of a SQL query result. The query is 'SELECT SUM(AMOUNT) from deposit where adate>'1995-03-01''. Below the query, there is a table with one row showing the sum of amounts as 14700.00. The interface includes a 'Show all' checkbox, a 'Number of rows' dropdown set to 25, a 'Filter rows' dropdown with a search field, and a '+ Options' link.

SUM(AMOUNT)
14700.00

5.List total deposit of customers living in city NAGPUR

SELECT SUM(D1.AMOUNT) FROM DEPOSIT D1 , CUSTOMER C1 WHERE C1.CITY = 'NAGPUR' AND C1.CNAME = D1.CNAME;

A screenshot of a SQL query result. The query is 'SELECT SUM(D1.AMOUNT) FROM DEPOSIT D1 , CUSTOMER C1 WHERE C1.CITY = 'NAGPUR' AND C1.CNAME = D1.CNAME;'. Below the query, there is a table with one row showing the sum of amounts as 4200.00. The interface includes a '+ Options' link.

SUM(D1.AMOUNT)
4200.00

6.List maximum deposit of customer living in Bombay

SELECT MAX(D1.AMOUNT) FROM DEPOSIT D1 , CUSTOMER C1 WHERE C1.CITY = 'Bombay' AND C1.CNAME = D1.CNAME;

A screenshot of a SQL query result. The query is 'SELECT MAX(D1.AMOUNT) FROM DEPOSIT D1 , CUSTOMER C1 WHERE C1.CITY = 'Bombay' AND C1.CNAME = D1.CNAME;'. Below the query, there is a table with one row showing the maximum amount as 5000.00. The interface includes a '+ Options' link.

MAX(D1.AMOUNT)
5000.00

7.List total deposit of customer having branch in BOMBAY

SELECT SUM (AMOUNT) from deposit,BRANCH where city='BOMBAY';

+ Options

SUM(AMOUNT)
48400.00

8.Count total number of branch cities

SELECT COUNT(DISTINCT (CITY)) FROM BRANCH ;

+ Options

COUNT(DISTINCT (CITY))
4

9.Count total number of customers cities

SELECT count(city) from CUSTOMER;

SELECT COUNT(CITY) FROM customer

+ Options

COUNT(CITY)
10

10.Give branch names and branch wise deposit

SELECT BNAME , SUM(AMOUNT) FROM DEPOSIT GROUP BY BNAME;

+ Options

BNAME	SUM(AMOUNT)
ANDHERI	2000.00
ANUNI	500.00
CHANDNI	1200.00
KAROLBAGH	3500.00
MG ROAD	3000.00
NEHRU PALACE	5000.00
POWAI	7000.00
VIRAR	10000.00
VRCE	1000.00

11.Give city wise name and branch wise deposit

SELECT C1.CITY , SUM(D1.AMOUNT) FROM CUSTOMER C1 , DEPOSIT D1 WHERE D1.CNAME = C1.CNAME GROUP BY C1.CITY;

+ Options

CITY	SUM(D1.AMOUNT)
BARODA	3500.00
BOMBAY	6000.00
CALCUTTA	1000.00
DELHI	500.00
NAGPUR	4200.00
SURAT	2000.00

12.Give the branch wise loan of customer living in NAGPUR

SELECT BNAME , SUM(AMOUNT) FROM BORROW,CUSTOMER WHERE city ='NAGPUR' GROUP BY BNAME;

+ Options	
BNAME	SUM(AMOUNT)
AJNI	10000.00
ANDHERI	4000.00
DHARAMPETH	6000.00
NEHRU PALACE	6000.00
VIRAR	16000.00
VRCE	2000.00

13.Count total number of customers

SELECT count(cname) from CUSTOMER;

+ Options	
count(cname)	
10	

14.Count total number of depositors branch wise

SELECT BName, count (*)from DEPOSIT, CUSTOMER where deposit.CNAME = CUSTOMER.CNAME
group by BNAME

+ Options	
BName	count(*)
ANDHERI	1
ANJNI	1
CHANDNI	1
KAROLBAGH	1
MG ROAD	1
NEHRU PALACE	1
VIRAR	1
VRCE	1

15.Count total number of depositors branch wise

SELECT BName, count (*)from DEPOSIT, CUSTOMER where deposit.CNAME = CUSTOMER.CNAME
group by BNAME

+ Options	
BName	count(*)
ANDHERI	1
ANJNI	1
CHANDNI	1
KAROLBAGH	1
MG ROAD	1
NEHRU PALACE	1
VIRAR	1
VRCE	1

16.Give maximum loan from branch VRCE

SELECT MAX(AMOUNT) FROM BORROW WHERE BNAME ='VRCE';

+ Options	
MAX(AMOUNT)	
1000.00	

17. Give the number of customers who are depositors as well as borrowers

```
SELECT COUNT(DISTINCT (CNAME)) FROM CUSTOMER WHERE CNAME IN ((SELECT CNAME FROM DEPOSIT) INTERSECT (SELECT CNAME FROM BORROW));
```

+ Options
COUNT(DISTINCT (CNAME))
6

EXPERIMENT NO.6 : SET OPERATIONS

1. List all the customers who are depositors but not borrowers.

```
SELECT CNAME FROM DEPOSIT MINUS SELECT CNAME FROM BORROW;
```

2. List all the customers who are both depositors and borrowers

```
SELECT CNAME FROM DEPOSIT UNION (SELECT CNAME FROM BORROW);
```

+ Options
CNAME
ANIL
SUNIL
MEHUL
MADHURI
PRAMOD
SANDIP
SHIVANI
KRANTI
MINU

3. List all the depositors having deposit in all the branches where Sunil is having Account

```
SELECT D1.CNAME FROM DEPOSIT D1 WHERE D1.BNAME IN (SELECT D2.BNAME FROM DEPOSIT D2 WHERE D2.CNAME = 'SUNIL');
```

CNAME
SUNIL
Copy Delete

4. List all the customers living in city NAGPUR and having branch city BOMBAY or DELHI

```
SELECT C1.CNAME FROM CUSTOMER C1, DEPOSIT D1, BRANCH B1 WHERE C1.CITY = 'NAGPUR' AND C1.CNAME = D1.CNAME AND D1.BNAME = B1.BNAME AND B1.CITY IN ('BOMBAY', 'DELHI');
```

CNAME
MADHURI
Delete

5. List all the depositors living in city NAGPUR

```
SELECT Distinct(CUSTOMER.CNAME) from CUSTOMER, DEPOSIT WHERE City='NAGPUR';
```


+ Options
CNAME
MADHURI
PRAMOD

6. List all the depositors living in the city NAGPUR and having branch in city BOMBAY

```
SELECT C1.CNAME FROM CUSTOMER C1,DEPOSIT D1, BRANCH B1 WHERE C1.CITY = 'NAGPUR' AND  
C1.CNAME = D1.CNAME AND D1.BNAME = B1.BNAME AND B1.CITY IN ('BOMBAY');
```

CNAME

7. List the branch cities of Anil and Sunil

```
SELECT B1.CITY FROM DEPOSIT D1, BRANCH B1 WHERE D1.BNAME = B1.BNAME AND D1.CNAME IN  
( 'SUNIL' , 'ANIL');
```

CITY
ete NAGPUR

11. List all the cities where branches of Anil and Sunil are locate

```
SELECT B1.CITY FROM BRANCH B1 WHERE B1.BNAME IN (SELECT D1.BNAME FROM DEPOSIT D1  
WHERE D1.CNAME IN ('ANIL','SUNIL'));
```

CITY
ete NAGPUR

EXPERIMENT NO.7 : JOIN OR CARTESIAN PRODUCT

1. Give name of customers having living city BOMBAY and branch city NAGPUR

```
SELECT D1.CNAME,D1.BNAME,C1.CNAME,C1.CITY,B1.CITY,B1.BNAME FROM DEPOSIT D1,CUSTOMER  
C1,BRANCH B1 WHERE C1.CITY = 'BOMBAY' AND B1.CITY = 'NAGPUR' AND D1.CNAME = C1.CNAME  
AND D1.BNAME = B1.BNAME;
```

CNAME	BNAME	CNAME	CITY	CITY	BNAME
-------	-------	-------	------	------	-------

2. Give names of customers having the same living city as their branch city

```
SELECT distinct(customer.CNAME), BRANCH.CITY FROM BRANCH, customer WHERE BRANCH.city =  
customer.city;
```

+ Options

CNAME	CITY
KRANTI	BOMBAY
MADHURI	NAGPUR
NAREN	BOMBAY
PRAMOD	NAGPUR
SHIVANI	BOMBAY
SUNIL	DELHI

3. Give names of customers who are borrowers as well as depositors and having city NAGPUR.

SELECT C1.CNAME FROM CUSTOMER C1,DEPOSIT D1,BORROW B1 WHERE C1.CITY='NAGPUR' AND C1.CNAME=D1.CNAME AND D1.CNAME = B1.CNAME;

CNAME
MADHURI
PRAMOD

4. Give names of borrowers having deposit amount greater than 1000 and loan amount greater than 2000.

SELECT BR1.CNAME, BR1.AMOUNT, D1.CNAME, D1.AMOUNT FROM BORROW BR1,DEPOSIT D1 WHERE D1.CNAME = BR1.CNAME AND D1.AMOUNT > 1000 AND BR1.AMOUNT > 2000;

CNAME	AMOUNT	CNAME	AMOUNT
MEHUL	5000.00	MEHUL	3500.00
PRAMOD	8000.00	PRAMOD	3000.00
KRANTI	3000.00	KRANTI	5000.00

5. Give names of depositors having the same branch as the branch of Sunil

SELECT D1.CNAME FROM DEPOSIT D1 WHERE D1.BNAME IN (SELECT D2.BNAME FROM DEPOSIT D2 WHERE D2.CNAME = 'SUNIL');

CNAME
SUNIL

6. Give names of borrowers having loan amount greater than the loan amount of Pramod

SELECT BR1.CNAME,BR1.AMOUNT FROM BORROW BR1 WHERE BR1.AMOUNT > ALL (SELECT BR2.AMOUNT FROM BORROW BR2 WHERE BR2.CNAME = 'PRAMOD');

CNAME	AMOUNT
-------	--------

7. Give the name of the customer living in the city where branch of depositor Sunil is located.

SELECT C.CNAME FROM CUSTOMER C WHERE C.CITY IN (SELECT B.CITY FROM BRANCH B WHERE B.BNAME IN (SELECT D.BNAME FROM DEPOSIT D WHERE D.CNAME='SUNIL'));

CNAME

8. Give branch city and living city of Pramod

```
SELECT B1.CITY , C1.CITY FROM BRANCH B1,CUSTOMER C1, DEPOSIT D1 WHERE C1.CNAME = 'PRAMOD' AND C1.CNAME = D1.CNAME AND D1.BNAME = B1.BNAME;
```

CITY	CITY
BANGALORE	NAGPUR

9. Give branch city of Sunil and branch city of Anil

```
SELECT B1.CITY FROM DEPOSIT D1, BRANCH B1 WHERE D1.BNAME = B1.BNAME AND D1.CNAME IN ('SUNIL' , 'ANIL');
```

CITY
NAGPUR

10. Give the living city of Anil and the living city of Sunil

```
SELECT C1.CNAME, C1.CITY FROM CUSTOMER C1 WHERE C1.CNAME = 'ANIL' OR C1.CNAME = 'SUNIL';
```

CNAME	CITY
ANIL	CALCUTTA
SUNIL	DELHI



