

ADVANCED DATA BASE MANAGEMENT SYSTEM LAB**Experiment No.: 1****Aim**

To study various DDL commands – CREATE, INSERT

Name: Kevin Chacko Abraham

Roll No: 13

Batch: BATCH B

Date: 25-03-2022

QUESTION

Create the following Tables and Insert values.

Table 1: DEPOSIT

ACTNO VARCHAR (5) PRIMARY KEY, FIRST LETTER MUST START WITH 'D'

CNAME VARCHAR (20) FOREIGN KEY REFERENCES CUSTOMER

BNAME VARCHAR (20) FOREIGN KEY REFERENCES BRANCH

AMOUNT NUMBER (8,2) NOT NULL, CANNOT BE 0

ADATE DATE

Table 2: BRANCH

BNAME VARCHAR2(20) PRIMARY KEY

CITY VARCHAR2(30) NOT NULL , any one of NAGPUR, DELHI, BANGALORE, BOMBAY

Table 3: CUSTOMER

CNAME VARCHAR (15) PRIMARY KEY

CITY VARCHAR (20) NOT NULL

Table 4: BORROW

LOANNO VARCHAR (28) PRIMARY KEY / FIRST LETTER MUST START WITH 'L'

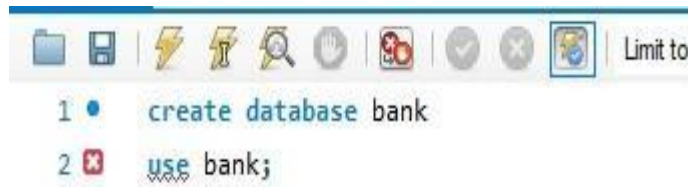
CNAME VARCHAR (15) FOREIGN KEY REFERENCES CUSTOMER

BNAME VARCHAR2(20) FOREIGN KEY REFERENCES BRANCH

AMOUNT NUMBER(8,2) NOT NULL, CANNOT BE 0

PROCEDURE

1. DATABASE



2. TABLE

```
1 • CREATE TABLE CUSTOMER (CNAME VARCHAR(15) PRIMARY KEY ,CITY VARCHAR(20) NOT NULL );
2 • CREATE TABLE BRANCH (BNAME VARCHAR(20) PRIMARY KEY,CITY VARCHAR(30) CHECK (CITY IN
3   ('NAGPUR','DELHI','BANGALORE','BOMBAY')) NOT NULL);
4 • CREATE TABLE BORROW(LOANNO VARCHAR(8)CHECK(LOANNO LIKE 'L%')PRIMARY KEY,CNAME VARCHAR(15) REFERENCES COUSTEMER(CNAME),
5   BNAME VARCHAR(20) REFERENCES BRANCH(BNAME),AMOUNT FLOAT (8)CHECK (AMOUNT>0)NOT NULL);
6 • CREATE TABLE DEPOSIT(ACTNO VARCHAR(5) CHECK(ACTNO LIKE 'D%')PRIMARY KEY ,CNAME VARCHAR(15) REFERENCES COUSTEMER(CNAME) ,
7   BNAME VARCHAR(20)REFERENCES BRANCH(BNAME),AMOUNT FLOAT(8)CHECK(AMOUNT>0)NOT NULL,ADATE DATE);
8 • INSERT INTO COUSTEMER VALUES('ANIL','CALCUTTA'),('SUNIL','DELHI'),('MEHUL','BARODA'),('MANDAR','PATNA'),('MADHURI','NAGPUR')
9   ,('SANDIP','SURAT'),('SHIVANI','BOMBAY'),('KRANTI','BOMBAY'),('NAREN','BOMBAY');
10 • INSERT INTO BRANCH VALUES('VRCE','NAGPUR'),('AJINI','NAGPUR'),('KAROLBAGH','DELHI'),('CHANDHINI','DELHI'),
11   ('DHARAMPETH','NAGPUR'),('MG ROAD','BANGALORE'),('ANDHERY','BOMBAY'),('NEHRU PALACE','DELHI'),('POWAI','BOMBAY');
12 • INSERT INTO DEPOSIT VALUES ('D100','ANIL','VRCE',1000.00,'1995-03-01'),('D101','SUNIL','ANJNI',500.00,'1996-01-04'),
13   ('D102','MEHUL','KAROLBAGH',3500.00,'1995-11-17'),('D104','MADHURI','CHANDNI',1200.00,'1995-12-17'),
14   ('D105','PRAMOD','MG ROAD',3000.00,'1996-03-27'),('D106','SANDIP','ANDHERI',2000.00,'1996-03-31'),
15   ('D107','SHIVANI','VIRAR',1000.00,'1995-09-05'),('D108','KRANTI','NEHRU PLACE',5000.00,'1995-07-02'),
16   ('D109','MINU','POWAI',7000.00,'1995-08-10');
17 • INSERT INTO BORROW VALUES('L201','ANIL','VRCE',1000.00),('L206','MEHUL','AJNI',5000.00),
18   ('L311','SUNIL','DHARAMPETH',3000.00),('L321','MADHURI','ANDHERI',2000.00),
19   ('L371','PRAMOD','VIRAR',8000.00),('L481','KRANTI','NEHRU PLACE',3000.00);
```

Output

1. TABLE DEPOSIT

1 • `SELECT * FROM tables.deposit;`

Result Grid | Filter Rows: | Edit:

	ACTNO	CNAME	BNAME	AMOUNT	ADATE
▶	D100	ANIL	VRCE	1000	1995-03-01
	D101	SUNIL	ANJNI	500	1996-01-04
	D102	MEHUL	KAROLBAGH	3500	1995-11-17
	D104	MADHURI	CHANDNI	1200	1995-12-17
	D105	PRAMOD	MG ROAD	3000	1996-03-27
	D106	SANDIP	ANDHERI	2000	1996-03-31
	D107	SHIVANI	VIRAR	1000	1995-09-05
	D108	KRANTI	NEHRU PLACE	5000	1995-07-02
	D109	MINU	POWAI	7000	1995-08-10
*	NULL	NULL	NULL	NULL	NULL

2. TABLE BRANCH


1 • `SELECT * FROM tables.branch;`

Result Grid | Filter Rows:

	BNAME	CITY
▶	AJNI	NAGPUR
	ANDHERI	BOMBAY
	CHANDNI	DELHI
	DHARAMPETH	NAGPUR
	KAROLBAGH	DELHI
	MG ROAD	BANGALORE
	NEHRU PALACE	DELHI
	POWAI	BOMBAY
	VRCE	NAGPUR
*	NULL	NULL

3. TABLE CUSTOMER


1 • `SELECT * FROM tables.customer;`

Result Grid  Filter Rows:

	CNAME	CITY
▶	ANIL	CALCUTTA
	KRANTI	BOMBAY
	MADHURI	NAGPUR
	MANDAR	PATNA
	MEHUL	BARODA
	NAREN	BOMBAY
	PRAMOD	NAGPUR
	SANDIP	SURAT
	SHIVANI	BOMBAY
	SUNIL	DELHI
▲	NULL	NULL

4. TABLE BORROW

1 • `SELECT * FROM tables.borrow;`

Result Grid  Filter Rows:

	LOANNO	CNAME	BNAME	AMOUNT
▶	L201	ANIL	VRCE	1000
	L206	MEHUL	AJNI	5000
	L311	SUNIL	DHARAMPETH	3000
	L321	MADHURI	ANDHERI	2000
	L371	PRAMOD	VIRAR	8000
	L481	KRANTI	NEHRU PLACE	3000
*	NULL	NULL	NULL	NULL

ADVANCED DATA BASE MANAGEMENT SYSTEM LAB**Experiment No.: 2****Aim**

To familiarize with selecting data from single table

Name: Kevin Chacko Abraham

Roll No:13

Batch: BATCH B

Date: 08-04-2022

Questions

1. List all data from table deposit.
2. List all data from borrow.
3. List all data from customer.
4. List all data from branch.
5. Give account no and amount of deposit.
6. Give customer name and account no of depositors.
7. Give name of customers.
8. Give name of branches.
9. Give name of borrows.
10. Give names of customer living in city Nagpur.
11. Give names of depositors having amount greater than 4000.
12. Give account date of Anil.
13. Give name of all branches located in Bombay.
14. Give name of borrower having loan number 1205.
15. Give names of depositors having account at VRCE.
16. Give names of all branches located in city Delhi.
17. Give name of the customers who opened account date '1-12-96'.
18. Give account no and deposit amount of customers having account opened between dates '1-12-96' and '1-5-96'.
19. Give name of the city where branch KAROLBAGH is located.
20. Give details of customer ANIL.

Procedure & Output

1. Display Deposit: `select * from deposit;`

Result Grid	Filter Rows:	Edit:	Export/Import:	Wra
ACTNO	CNAME	BNAME	AMOUNT	ADATE
D100	ANIL	VRCE	1000	1995-03-01
D101	SUNIL	ANJNI	500	1996-01-04
D102	MEHUL	KAROLBAGH	3500	1995-02-17
D104	MADHURI	CHANDNI	1200	1995-12-17
D105	PRAMOD	MG ROAD	3000	1996-03-27
D106	SANDIP	ANDHERI	2000	1996-03-17
D107	SHIVANI	VIRAR	1000	1995-09-05
D108	KRANTI	NEHRU PLACE	5000	1995-07-02
D109	MINU	POWAI	7000	1995-08-10
*	NULL	NULL	NULL	NULL

2. Display Borrow: `select * from borrow;`

Result Grid	Filter Rows:	Edit:	Export/In
LoanNo	CName	BNAME	AMOUNT
L201	ANIL	VRCE	1000
L206	MEHUL	AJNI	5000
L311	SUNIL	DHARAMPETH	3000
L321	MADHURI	ANDHERI	2000
L371	PRAMOD	VIRAR	8000
L481	KRANTI	NEHRU PLACE	3000
*	NULL	NULL	NULL

3. Display Customer: `select * from customer;`

Result Grid	Filter Rows:
CNAME	CITY
ANIL	CALCUTTA
KRANTI	BOMBAY
MADHURI	NAGPUR
MANDAR	PATNA
MEHUL	BARODA
NAREN	BOMBAY
PRAMOD	NAGPUR
SANDIP	SURAT
SHIVANI	BOMBAY
SUNIL	DELHI
*	NULL

4. Display Branch: select * from branch;

Result Grid		
	Bname	City
▶	AJNI	NAGPUR
	ANDHERI	BOMBAY
	CHANDNI	DELHI
	DHARAMPETH	NAGPUR
	KAROLBAGH	DELHI
	MG ROAD	BANGALORE
	NEHRU PALACE	DELHI
	POWAI	BOMBAY
	VRCE	NAGPUR
*	NULL	NULL

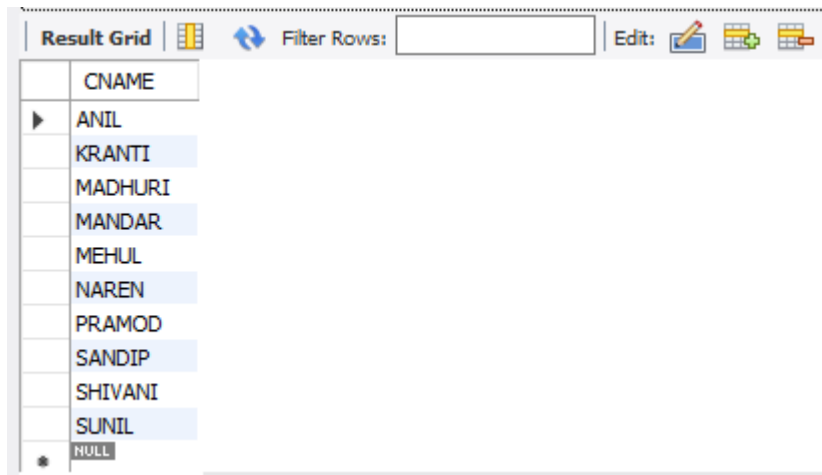
5. SELECT ACTNO,AMOUNT FROM DEPOSIT;

Result Grid		
	ACTNO	AMOUNT
▶	D100	1000
	D101	500
	D102	3500
	D104	1200
	D105	3000
	D106	2000
	D107	1000
	D108	5000
	D109	7000
*	NULL	NULL

6. SELECT CNAME,ACTNO FROM DEPOSIT;

Result Grid		
	CNAME	ACTNO
▶	ANIL	D100
	SUNIL	D101
	MEHUL	D102
	MADHURI	D104
	PRAMOD	D105
	SANDIP	D106
	SHIVANI	D107
	KRANTI	D108
	MINU	D109
*	NULL	NULL

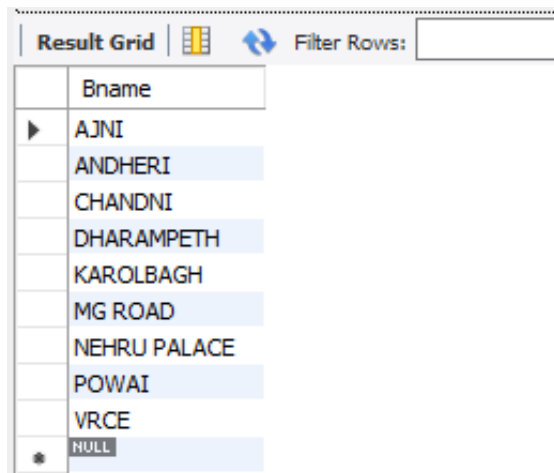
7. SELECT CNAME FROM CUSTOMER;



The screenshot shows a database query result grid. The header row is labeled 'CNAME'. The data rows list the following names: ANIL, KRANTI, MADHURI, MANDAR, MEHUL, NAREN, PRAMOD, SANDIP, SHIVANI, SUNIL, and NULL. The interface includes a 'Filter Rows' field and an 'Edit' button.

CNAME
ANIL
KRANTI
MADHURI
MANDAR
MEHUL
NAREN
PRAMOD
SANDIP
SHIVANI
SUNIL
NULL

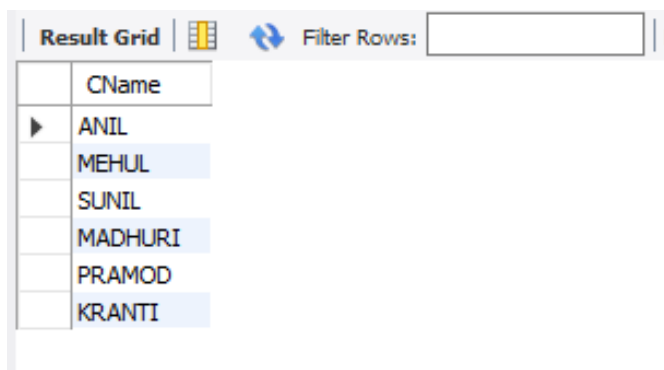
8. SELECT BNAME FROM BRANCH;



The screenshot shows a database query result grid. The header row is labeled 'Bname'. The data rows list the following names: AJNI, ANDHERI, CHANDNI, DHARAMPETH, KAROLBAGH, MG ROAD, NEHRU PALACE, POWAI, VRCE, and NULL. The interface includes a 'Filter Rows' field.

Bname
AJNI
ANDHERI
CHANDNI
DHARAMPETH
KAROLBAGH
MG ROAD
NEHRU PALACE
POWAI
VRCE
NULL

9. SELECT CNAME FROM BORROW;



The screenshot shows a database query result grid. The header row is labeled 'CName'. The data rows list the following names: ANIL, MEHUL, SUNIL, MADHURI, PRAMOD, and KRANTI. The interface includes a 'Filter Rows' field.

CName
ANIL
MEHUL
SUNIL
MADHURI
PRAMOD
KRANTI

10. SELECT CNAME FROM CUSTOMER WHERE CITY='NAGPUR';

Result Grid	Filter Rows:	
CNAME		
MADHURI		
PRAMOD		
NULL		

11. SELECT CNAME from DEPOSIT where AMOUNT>4000;

Result Grid	Filter Rows:	Export:	Wrap C
CNAME			
KRANTI			
MINU			

12. SELECT ADATE FROM DEPOSIT where CNAME='ANIL';

Result Grid	Filter Rows:	Export:	Wrap C
ADATE			
1995-03-01			

13. SELECT BNAME from BRANCH where CITY='Bombay';

Result Grid	Filter Rows:	Edit:	
Bname			
ANDHERI			
POWAI			
NULL			

14. SELECT CNAME from BORROW where LOANNO='L205';

Result Grid	Filter Rows:	Export:	Wrap C
CName			
MEHUL			

15. SELECT CNAME from DEPOSIT WHERE BNAME='VRCE';

Result Grid	Filter Rows:	Export:	Wrap Cell Con
CNAME			
ANIL			

16. SELECT BNAME from BRANCH WHERE CITY='Delhi';

Result Grid		Filter Rows:	Edit:
	Bname		
▶	CHANDNI		
	KAROLBAGH		
	NEHRU PALACE		
*	NULL		

17. SELECT CNAME from DEPOSIT WHERE ADATE='1995-03-1';

Result Grid		Filter Rows:	Export:
	CNAME		
▶	ANIL		

18. SELECT ACTNO,AMOUNT from DEPOSIT WHERE ADATE BETWEEN '1996-12-1' AND '1996-05-1';

Result Grid		Filter Rows:	Edit:
	ACTNO	AMOUNT	
▶	D100	1000	
	D108	5000	
	D109	7000	
*	NULL	NULL	

19. SELECT CITY from BRANCH WHERE BNAME='KAROLBAGH';

Result Grid		Filter Rows:
	CITY	
▶	DELHI	

20. SELECT * from customer join borrow on customer.cname=borrow.cname join deposit on deposit.cname=borrow.cname WHERE customer.cname='ANIL';

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

	CNAME	CITY	LoanNo	CName	BNAME	AMOUNT	ACTNO	CNAME	BNAME	AMOUNT	ADATE
▶	ANIL	CALCUTTA	L201	ANIL	VRCE	1000	D100	ANIL	VRCE	1000	1995-03-01

ADVANCED DATA BASE MANAGEMENT SYSTEM LAB

Name : Kevin Chacko Abraham
Roll No: 13
Batch: MCA B
Date: 08 /04/2022

EXPERIMENT 3**AIM**

To familiarize DDL Commands- ALTER,DROP,TRUNCATE,RENAME

QUESTION

1.Create a table emp with attributes empno number(4)as primary key, ename char(10), hiredate , salary, commission insert 5 rows of data

2.Modifying the structure of tables

- a. Add new columns: sal number (7,2)
- b. Dropping a column from a table: sal
- c. Modifying existing column: ename varchar2(15)
- d. Renaming the tables: emp to emp1
- e. truncating the tables: emp1
- f. Destroying tables:emp

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

4.Create a table student as regno number (6), mark number (3) check constraint (mark >=0 and mark <=100));

5.Create a table cust with(custid number(6) constraint unique, name char(10)

PROCEDURE & OUTPUT

1. CREATE TABLE emp (EMPNO INT (4) PRIMARY KEY, ENAME CHAR (10), HIREDATE DATE, SALARY INT(5),COMMISSION INT(5));

```
INSERT INTO emp (EMPNO, ENAME, HIREDATE, SALARY, COMMISSION) VALUES
(101,'RAMESH','1980-01-17',5000, null), (102,'AJAY','1985-07-05',5000,500),
(103,'RAVI','1981-08-12', 1500, null), (104,'Nikesh','1983-03-03',3000,700),
(105,'Ravi','1985-07-05', 3000, null);
```

```
SELECT * FROM emp;
```

	EMPNO	ENAME	HIREDATE	SALARY	COMMISSION
▶	101	RAMESH	1980-01-17	5000	NULL
	102	AJAY	1985-07-05	5000	500
	103	RAVI	1981-08-12	1500	NULL
	104	Nikesh	1983-03-03	3000	700
	105	Ravi	1985-07-05	3000	NULL
	NULL	NULL	NULL	NULL	NULL

2. a. ALTER TABLE emp ADD sal int;

```
SELECT * FROM emp;
```

	EMPNO	ENAME	HIREDATE	SALARY	COMMISSION	sal
▶	101	RAMESH	1980-01-17	5000	NULL	NULL
	102	AJAY	1985-07-05	5000	500	NULL
	103	RAVI	1981-08-12	1500	NULL	NULL
	104	Nikesh	1983-03-03	3000	700	NULL
	105	Ravi	1985-07-05	3000	NULL	NULL
*	NULL	NULL	NULL	NULL	NULL	NULL

2. b. ALTER TABLE emp DROP COLUMN sal;

```
SELECT * FROM emp;
```

	EMPNO	ENAME	HIREDATE	SALARY	COMMISSION
▶	101	RAMESH	1980-01-17	5000	NULL
	102	AJAY	1985-07-05	5000	500
	103	RAVI	1981-08-12	1500	NULL
	104	Nikesh	1983-03-03	3000	700
	105	Ravi	1985-07-05	3000	NULL
*	NULL	NULL	NULL	NULL	NULL

2. c. ALTER TABLE emp MODIFY ename VARCHAR (15);

SELECT * FROM emp;

	EMPNO	ename	HIREDATE	SALARY	COMMISSION
▶	101	RAMESH	1980-01-17	5000	NULL
	102	AJAY	1985-07-05	5000	500
	103	RAVI	1981-08-12	1500	NULL
	104	Nikesh	1983-03-03	3000	700
	105	Ravi	1985-07-05	3000	NULL
*	NULL	NULL	NULL	NULL	NULL

2. d. RENAME table emp to emp1;

SELECT * FROM emp;

	EMPNO	ename	HIREDATE	SALARY	COMMISSION
▶	101	RAMESH	1980-01-17	5000	NULL
	102	AJAY	1985-07-05	5000	500
	103	RAVI	1981-08-12	1500	NULL
	104	Nikesh	1983-03-03	3000	700
	105	Ravi	1985-07-05	3000	NULL
*	NULL	NULL	NULL	NULL	NULL

2. e. TRUNCATE TABLE emp1;

SELECT * FROM emp;

	EMPNO	ename	HIREDATE	SALARY	COMMISSION
*	NULL	NULL	NULL	NULL	NULL

2. f. DROP TABLE emp1;

SELECT * FROM emp;

✓	52	11:26:48	DROP TABLE emp1
---	----	----------	-----------------

3. CREATE TABLE stud(sname varchar(20) PRIMARY KEY, rollno int NOT NULL, dob date NOT NULL);

SELECT * FROM stud;

	sname	rollno	dob
*	NULL	NULL	NULL

4 .Create table student (regno int, mark int(3) constraint b check (mark >=0 and mark <=100)); SELECT * from STUDENT;

	regno	mark
--	-------	------

5. CREATE TABLE cust(custid number(6) UNIQUE, name char(10));
select * from cust;

	custid	name
--	--------	------

ADVANCED DATABASE MANAGEMENT SYSTEM LAB**Experiment No.: 4**

Name: Kevin Chacko Abraham

Roll No: 13

Batch: BATCH B

Date: 25-03-2022

Aim

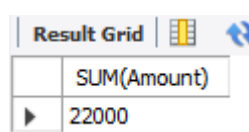
To familiarize with aggregate functions

Questions

1. List total loan
2. List total deposit
3. List total loan taken from KAROLBAGH branch
4. List total deposit of customers having account date later than 1-Jan-96
5. List total deposit of customers living in city NAGPUR
6. List maximum deposit of customer living in Bombay
7. List total deposit of customer having branch in BOMBAY
8. Count total number of branch cities
9. Count total number of customers cities
10. Give branch names and branch wise deposit
11. Give city wise name and branch wise deposit
12. Give the branch wise loan of customer living in NAGPUR
13. Count total number of customers
14. Count total number of depositors branch wise
15. Give maximum loan from branch VRCE
16. Give the number of customers who are depositors as well as borrowers

Procedure & Output

1. SELECT SUM(Amount) FROM borrow;



Result Grid	
	SUM(Amount)
▶	22000

2. SELECT SUM(Amount) FROM deposit;

Result Grid	
	SUM(Amount)
▶	24200

3. SELECT MAX(Amount) FROM borrow WHERE bname ='Karlobhag';

Result Grid	
	MAX(Amount)
▶	NULL

4. SELECT SUM(Amount) from deposit where adate>'1995-03-01';

Result Grid		Filter Rows
	SUM(Amount)	
▶	23200	

5. SELECT SUM(D1.Amount) FROM deposit D1 , customer C1 WHERE C1.city = 'NAGPUR' AND C1.cname = D1.cname;

Result Grid		Filter
	SUM(D1.Amount)	
▶	4200	

6. SELECT MAX(D1.Amount) FROM deposit D1 , customer C1 WHERE C1.city = 'Bombay' AND C1.cname = D1.cname;

Result Grid		Filter Ro
	MAX(D1.Amount)	
▶	5000	

7. SELECT SUM(Amount) from deposit,branch where city='Bombay';

Result Grid		Filter
	SUM(Amount)	
▶	48400	

8. SELECT COUNT(DISTINCT(city)) FROM branch ;

Result Grid		
	count(city)	
▶	10	

9. SELECT count(city) from customer;

Result Grid	
	count(city)
▶	10

10. SELECT bname , SUM(Amount) FROM deposit GROUP BY bname;

Result Grid	
	Filter Rows:
bname	SUM(Amount)
▶ Vrce	1000
Anjni	500
Karlobagh	3500
Chandni	1200
MG Road	3000
Andheri	2000
Virar	1000
Nehru Place	5000
Powai	7000

11. SELECT C1.city , SUM(D1.amount) FROM customer C1 , deposit D1 WHERE D1.cname = C1.cname GROUP BY C1.city;

Result Grid	
	Filter Rows:
city	SUM(D1.amount)
Culcutta	1000
Delhi	500
▶ Beroda	3500
Nagpur	4200
Surat	2000
Bombay	6000

12. SELECT bname , SUM(Amount) FROM borrow,customer WHERE city ='Nagpur' GROUP BY bname;

Result Grid	
	Filter Row
bname	SUM(Amount)
▶ Vrce	2000
Ajni	100 10000
Dharampeth	6000
Anderi	4000
Virar	16000
Nehru place	6000

13. SELECT count(cname) from customer;

Result Grid	
	count(cname)
▶	10

14. select bname, count(*) from deposit, customer where deposit.cname = customer.cname group by bname;

Result Grid		
	bname	count(*)
▶	Vrce	1
	Anjni	1
	Karlobagh	1
	Chandni	1
	MG Road	1
	Andheri	1
	Virar	1
	Nehru Place	1

15. SELECT MAX(Amount) FROM borrow WHERE bname ='Vrce';

Result Grid	
	MAX(Amount)
▶	1000

16. select count(distinct(b1.cname)) from borrow b1, deposit d1 where b1.cname in (select cname from deposit);

Result Grid	
	count(distinct(b1.cname))
▶	6

ADVANCED DATA BASE MANAGEMENT SYSTEM LAB**Experiment No.: 5****Name: Kevin Chacko Abraham****Roll No: 13****Batch: BATCH B****Date: 25-03-2022****Aim**

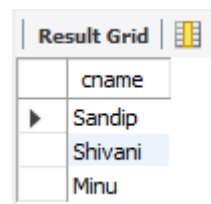
To familiarize with set operations

Questions

1. List all the customers who are depositors but not borrowers.
2. List all the customers who are both depositors and borrowers
3. List all the depositors having deposit in all the branches where Sunil is having Account
4. List all the customers living in city NAGPUR and having branch city BOMBAY or DELHI
5. List all the depositors living in city NAGPUR
6. List all the depositors living in the city NAGPUR and having branch in city BOMBAY
7. List the branch cities of Anil and Sunil
8. List the customers having deposit greater than 1000 and loan less than 10000.
9. List the cities of depositors having branch VRCE.
10. List the depositors having amount less than 1000 and living in the same city as Anil
11. List all the cities where branches of Anil and Sunil are locate
12. List the amount for the depositors living in the city where Anil is living

Procedure & Output

1. SELECT distinct(d1.cname) FROM DEPOSIT d1 where d1.cname not in (SELECT CNAME FROM BORROW);



Result Grid	
	cname
▶	Sandip
	Shivani
	Minu

2. select d1.cname from deposit d1 where d1.cname in (select cname from borrow);

Result Grid	
	cname
▶	Anil
	Sunil
	Mehul
	Madhuri
	Pramod
	Kranti

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

Result Grid	
	CNAME
▶	Sunil

4. 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');

Result Grid	
	CNAME
▶	Madhuri

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

Result Grid	
	CNAME
▶	Pramod
	Madhuri

6. 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');

Result Grid	
	CNAME

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

Result Grid	
	CITY
▶	Nagpur

8. SELECT DISTINCT D1.CNAME FROM deposit D1, borrow B1 WHERE D1.AMOUNT>1000 AND B1.AMOUNT<10000;

Result Grid	
	CNAME
▶	Mehul
	Madhuri
	Pramod
	Sandip
	Kranti
	Minu

9. SELECT B1.CITY FROM deposit D1, branch B1 WHERE D1.BNAME=B1.BNAME AND B1.BNAME='VRCE';

Result Grid	
	CITY
▶	Nagpur

10. SELECT D1.CNAME FROM deposit D1, customer C1 WHERE AMOUNT<1000 AND C1.CITY=(C1.CNAME='ANIL');

Result Grid	
	CNAME

11. SELECT D1.CNAME FROM DEPOSIT D1,CUSTOMER C1 , CUSTOMER C2 WHERE C1.CITY = C2.CITY AND C2.CNAME = 'ANIL' AND C1.CNAME = D1.CNAME AND D1.AMOUNT < 1000;

Result Grid	
	CITY
▶	Nagpur

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

Result Grid			
	CNAME	AMOUNT	CITY
▶	Anil	1000	Culcutta

ADVANCED DATA BASE MANAGEMENT SYSTEM LAB**Experiment No.: 6****Aim**

To familiarize with join or cartesian product

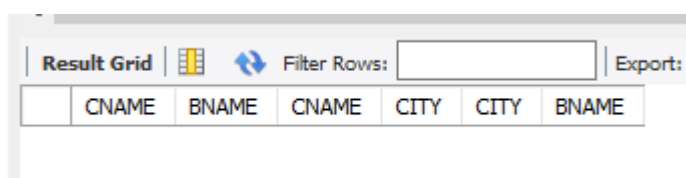
Questions

1. Give name of customers having living city BOMBAY and branch city NAGPUR
2. Give names of customers having the same living city as their branch city
3. Give names of customers who are borrowers as well as depositors and having city NAGPUR.
4. Give names of borrowers having deposit amount greater than 1000 and loan amount greater than 2000.
5. Give names of depositors having the same branch as the branch of Sunil
6. Give names of borrowers having loan amount greater than the loan amount of Pramod
7. Give the name of the customer living in the city where branch of depositor Sunil is located.
8. Give branch city and living city of Pramod
9. Give branch city of Sunil and branch city of Anil
10. Give the living city of Anil and the living city of Sunil

Procedure & Output

1. SELECT D1.CNAME FROM DEPOSIT D1,CUSTOMER C1,BRANCH B1 WHERE

C1.CITY = 'BOMBAY' AND B1.CITY = 'Bombay' AND D1.CNAME = C1.CNAME AND D1.BNAME = B1.BNAME;



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

2. SELECT distinct(customer.CNAME), BRANCH.CITY FROM BRANCH, customer

WHERE BRANCH.city = customer.city;

Result Grid		
	CNAME	CITY
▶	Kranti	Bombay
	Madhuri	Nagpur
	Naren	Bombay
	Pramod	Nagpur
	Shivani	Bombay
	Sunil	Delhi

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

Result Grid	
	CNAME
▶	Madhuri
	Pramod

4. 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;

Result Grid				
	CNAME	AMOUNT	CNAME	AMOUNT
▶	Pramod	3000.00	Pramod	3000
	Mehul	5000.00	Mehul	3500
	Sunil	3000.00	Sunil	5000
	Kranti	5000.00	Kranti	5000

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

Result Grid	
	CNAME
▶	Sunil

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

Result Grid		
	CNAME	AMOUNT
▶	Mehul	5000.00
	Kranti	5000.00

7. 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'));

Result Grid	
	CNAME
▶	Madhuri
	Pramod

8. 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;

Result Grid		
	CITY	CITY
▶	Bangalore	Nagpur

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

Result Grid	
	CITY
▶	Nagpur
	Nagpur

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

Result Grid		
	CNAME	CITY
▶	Anil	Calcutta
	Sunil	Delhi

ADVANCED DATA BASE MANAGEMENT SYSTEM LAB**Experiment No.: 7****Name: Kevin Chacko Abraham****Roll No: 13****Batch: BATCH B****Date: 06-05-2022****Aim**

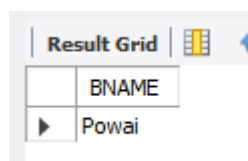
To familiarize with Group by and Having clause

Questions

1. List the branches having sum of deposit more than 5000.
2. List the branches having sum of deposit more than 500 and located in city BOMBAY
3. List the names of customers having deposited in the branches where the average deposit is more than 5000.
4. List the names of customers having maximum deposit
5. List the name of branch having highest number of depositors?
6. Count the number of depositors living in NAGPUR.
7. Give names of customers in VRCE branch having more deposit than any other customer in same branch
8. Give the names of branch where number of depositors is more than 5
9. Give the names of cities in which the maximum number of branches are located
10. Count the number of customers living in the city where branch is located

Procedure & Output

1. SELECT D.BNAME FROM DEPOSIT D, BRANCH B WHERE
D.BNAME=B.BNAME AND B.CITY='BOMBAY' GROUP BY D.BNAME HAVING
SUM(D.AMOUNT)>5000;



	BNAME
▶	Powai

2. SELECT D.BNAME FROM DEPOSIT D, BRANCH B WHERE

D.BNAME=B.BNAME GROUP BY D.BNAME HAVING SUM(D.AMOUNT)>5000;



Result Grid	
	BNAME
▶	Powai

3. select CNAME from deposit where AMOUNT=(select AVG(Amount) from DEPOSIT

GROUP BY BNAME having AVG(Amount)>5000);

Result Grid	
	CNAME
▶	Naren

4. SELECT MAX(AMOUNT),CNAME FROM deposit;

Result Grid			Filter Rows:
	MAX(AMOUNT)	CNAME	
▶	7000	Anil	

**5. SELECT D1.BNAME FROM DEPOSIT D1 GROUP BY D1.BNAME HAVING
COUNT(D1.CNAME) >= ALL (SELECT COUNT(D2.CNAME) FROM DEPOSIT D2
GROUP BY D2.BNAME);**

Result Grid	
	BNAME
▶	Andheri

**6. select count(deposit.cname)from deposit,CUSTOMER where
CUSTOMER.CITY='nagpur';**

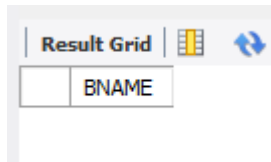
Result Grid	
	count(deposit.cname)
▶	18

**7. Select CNAME from deposit where BNAME='VRCE' and amount=(select
max(AMOUNT) from deposit where BNAME='VRCE');**

Result Grid	
	CNAME
▶	Anil

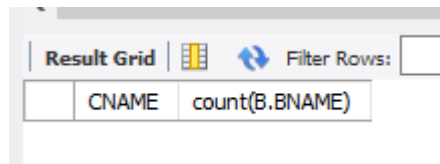
8. SELECT BNAME from deposit GROUP BY BNAME HAVING

COUNT(BNAME)>5;



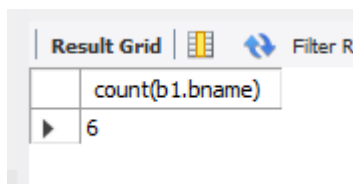
BNAME

9. select C.CNAME ,count(B.BNAME) from CUSTOMER C inner join Branch B on
C.CNAME=B.BNAME group by C.Cname order by count(B.BName) DESC;



CNAME	count(B.BNAME)
-------	----------------

10. select count(b1.bname) From deposit d1 , borrow b1 , customer c1 Where
c1.cname=d1.cname and d1.cname=b1.cname and c1.city in (select city from customer);



count(b1.bname)
6