

ASSIGNMENT ON ADMS LAB

Submitted to

Merin Manoj

MCA Department

Amal Jyothi College of Engineering

Submitted by

Harithakrishnan

MCA S2 A

Rollno: 40

EXPERIMENT NO: 1

CREATING TABLES:

```
create table BRANCH(bname VARCHAR(20) PRIMARY KEY,city VARCHAR(30) CHECK (CITY IN ('NAGPUR','DELHI','BANGALORE','BOMBAY')) NOT NULL);
```

```
create table CUSTOMER (cname VARCHAR(15) PRIMARY KEY,city VARCHAR(20) NOT NULL);
```

```
create table BORROW (loanno VARCHAR(8) PRIMARY KEY check (loanno LIKE "L%"),cname VARCHAR(15),FOREIGN KEY (cname)
```

```
REFERENCES CUSTOMER(cname),bname VARCHAR(20),FOREIGN KEY(bname) REFERENCES BRANCH(bname),AMOUNT FLOAT(8,2) CHECK (amount > 0) NOT NULL);
```

```
create table DEPOSIT (actno varchar(10) CHECK(actno LIKE 'D%') primary key ,cname varchar(15)
```

```
REFERENCES CUSTOMER(cname),bname varchar(20) REFERENCES BRANCH(bname),amount float(8,2) NOT NULL,adate DATE)
```

Inserting values in created tables

```
INSERT INTO BRANCH (BNAME,CITY) VALUES ('VRCE','NAGPUR');
```

```
INSERT INTO BRANCH (BNAME,CITY) VALUES ('AJNI','NAGPUR');
```

```
INSERT INTO BRANCH (BNAME,CITY) VALUES ('KAROLBAGH','DELHI');
```

```
INSERT INTO BRANCH (BNAME,CITY) VALUES ('CHANDNI','DELHI');
```

```
INSERT INTO BRANCH (BNAME,CITY) VALUES ('DHARAMPETH','NAGPUR');
```

```
INSERT INTO BRANCH (BNAME,CITY) VALUES ('MG-ROAD','BANGALORE');
```

```
INSERT INTO BRANCH (BNAME,CITY) VALUES ('ANDHERI','BOMBAY');
```

```
INSERT INTO BRANCH (BNAME,CITY) VALUES ('NEHRU-PALACE','DELHI');
```

```
INSERT INTO BRANCH (BNAME,CITY) VALUES ('POWAI','BOMBAY');
```

```
INSERT INTO CUSTOMER VALUES('ANIL','CALCUTTA');
INSERT INTO CUSTOMER VALUES('SUNIL','DELHI');
INSERT INTO CUSTOMER VALUES('MEHUL','BARODA');
INSERT INTO CUSTOMER VALUES('MANDAR','PATNA');
INSERT INTO CUSTOMER VALUES('MADHURI','NAGPUR');
INSERT INTO CUSTOMER VALUES('PRAMOD',      'NAGPUR');
INSERT INTO CUSTOMER VALUES('SANDIP','SURAT');
INSERT INTO CUSTOMER VALUES('SHIVANI','BOMBAY');
INSERT INTO CUSTOMER VALUES('KRANTI','BOMBAY');
INSERT INTO CUSTOMER VALUES('NAREN','BOMBAY');
```

```
INSERT INTO BORROW VALUES('L201', 'ANIL', 'VRCE',
1000.00);
INSERT INTO BORROW VALUES('L206', 'MEHUL', 'AJNI',
5000.00);
INSERT INTO BORROW VALUES('L311', 'SUNIL',
'DHARAMPETH', 3000.00);
INSERT INTO BORROW VALUES('L321', 'MADHURI',
'ANDHERI', 2000.00);
INSERT INTO BORROW VALUES('L371', 'PRAMOD', 'VIRAR',
8000.00);
INSERT INTO BORROW VALUES('L481', 'KRANTI', 'NEHRU
PLACE', 3000.00);
```

```
INSERT INTO DEPOSIT VALUES('D100','ANIL','VRCE', 1000.00 ,'01-MAR-95');
INSERT INTO DEPOSIT VALUES('D101','SUNIL','ANJNI',500.00,'04-JAN-96');
```

```

INSERT INTO DEPOSIT VALUES('D102','MEHUL','KAROLBAGH',3500.00,'17-NOV-95');
INSERT INTO DEPOSIT VALUES('D104','MADHURI','CHANDNI',1200.00,'17-DEC-95');
INSERT INTO DEPOSIT VALUES('D105','PRAMOD','MG ROAD',3000.00,'27-MAR-96');
INSERT INTO DEPOSIT VALUES('D106','SANDIP','ANDHERI',2000.00,'31-MAR-96');
INSERT INTO DEPOSIT VALUES('D107','SHIVANI','VIRAR',1000.00,'05-SEP-95');
INSERT INTO DEPOSIT VALUES('D108','KRANTI','NEHRU PLACE',5000.00,'02-JUL-95');
INSERT INTO DEPOSIT VALUES('D109','MINU','POWAI',7000.00,'10-AUG-95');

```

Selecting Data From Single Table

1. List all data from table deposite

```
select * from DEPOSIT;
```

actno	cname	bname	amount	adate
D100	ANIL	VRCE	1000	1995-03-01T00:00:00.000Z
D101	SUNIL	AJNI	500	1996-01-04T00:00:00.000Z
D102	MEHUL	KAROLBAGH	3500	1995-11-17T00:00:00.000Z
D103	MADHURI	CHANDNI	1200	1995-12-17T00:00:00.000Z
D104	PRAMOD	MG ROAD	3000	1996-03-27T00:00:00.000Z
D105	SANDIP	ANDHERI	2000	1996-03-31T00:00:00.000Z
D106	SHIVANI	DHARAMPETH	1000	1995-09-05T00:00:00.000Z
D107	KRANTI	NEHRU PALACE	5000	1995-07-02T00:00:00.000Z
D108	NAREN	POWAY	7000	1995-08-10T00:00:00.000Z

2. List all data from borrow

select * from BORROW;

loanno	cname	bname	amount
L201	ANIL	VRCE	1000
L206	MEHUL	AJNI	5000
L311	SUNIL	DHARAMPETH	3000
L321	MADHURI	ANDHERI	2000
L371	PRAMOD	POWAY	8000
L481	KRANTI	NEHRU PALACE	3000

3. List all data from customer

select * from CUSTOMER;

cname city

ANIL	CALCUTTA
KRANTI	BOMBAY
MADHURI	NAGPUR
MANDAR	PATNA
MEHUL	BARODA
NAREN	BOMBAY
PRAMOD	NAGPUR
SANDIP	SURAT
SHIVANI	BOMBAY
SUNIL	DELHI

4. List all data from branch

```
SELECT * FROM BRANCH;
```

bname City

AJNI	NAGPUR
ANDHERI	BOMBAY
CHANDNI	DELHI
DHARAMPETH	NAGPUR
KAROLBAGH	DELHI
MG ROAD	BANGALORE
NEHRU PALACE	DELHI
POWAY	BOMBAY
VRCE	NAGPUR

5. Give account no and amount of deposit

SELECT ACTNO,AMOUNT FROM DEPOSIT;

actno Amount

D100	1000
D101	500
D102	3500

actno Amount

D103	1200
D104	3000
D105	2000
D106	1000
D107	5000
D108	7000

6. Give customer name and account no of depositors

```
SELECT CNAME,ACTNO FROM DEPOSIT;
```


cname actno

ANIL	D100
KRANTI	D107
MADHURI	D103
MEHUL	D102
NAREN	D108
PRAMOD	D104
SANDIP	D105
SHIVANI	D106
SUNIL	D101

7. Give name of customers

SELECT CNAME FROM CUSTOMER;

cname

ANIL
KRANTI
MADHURI
MANDAR
MEHUL
NAREN
PRAMOD

SANDIP
SHIVANI
SUNIL

8. Give name of branches.

SELECT BNAME FROM BRANCH;

bname

AJNI
ANDHERI
CHANDNI
DHARAMPETH
KAROLBAGH
MG ROAD
NEHRU PALACE
POWAY
VRCE

9. Give name of borrows

SELECT CNAME FROM BORROW;

cname

ANIL
KRANTI
MADHURI
MEHUL
PRAMOD
SUNIL

10. Give names of customer living in city Nagpur

SELECT CNAME FROM CUSTOMER WHERE CITY='NAGPUR';

cname

MADHURI
PRAMOD

11. Give names of depositors having amount greater than 4000

SELECT CNAME from DEPOSIT where AMOUNT>4000;

cname

KRANTI
NAREN

12. Give account date of Anil

SELECT ADATE FROM DEPOSIT where CNAME='ANIL'

adate

1995-03-01T00:00:00.000Z

13. Give name of all branches located in Bombay

SELECT BNAME from BRANCH where CITY='Bombay'

bname

ANDHERI

POWAY

14. Give name of borrower having loan number L205

SELECT CNAME from BORROW where LOANNO='L206'

cname

MEHUL

15. Give names of depositors having account at VRCE

SELECT CNAME from DEPOSIT WHERE BNAME='VRCE'

cname

ANIL

16. Give names of all branched located in city Delhi

SELECT BNAME from BRANCH WHERE CITY='Delhi'

bname

CHANDNI

KAROLBAGH

NEHRU PALACE

17. Give name of the customers who opened account date '1-12-96'

SELECT CNAME from DEPOSIT WHERE ADATE='1996-12-1'

18. Give account no and deposit amount of customers having account opened between dates '1-12-96' and '1-5-96'

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

19. Give name of the city where branch KAROLBAGH is located

SELECT CITY from BRANCH where BNAME='KAROLBAGH'

city

DELHI

20. Give details of customer ANIL

```
SELECT * from CUSTOMER join BORROW on  
CUSTOMER.CNAME=BORROW.CNAME join DEPOSIT on  
DEPOSIT.CNAME=BORROW.CNAME where  
CUSTOMER.CNAME='ANIL';
```

CNAME	CITY	LOANNO	BNAME	AMOUNT	ACTNO	ADATE
ANIL	CALCUTTA	L201	VRCE	1000	D100	1995-03-01T00:00:00.000Z

EXPERIMENT NO 3:

DDL COMMANDS AND CONSTRAINTS:

Table creation:

```
1. CREATE TABLE EMP(EMPNO NUMERIC(4),ENAME  
CHAR(10),HIREDATE DATE,SALARY FLOAT,COMM  
INTEGER(20),PRIMARY KEY(EMPNO));
```

Value insertion:

```
INSERT INTO EMP VALUES(101,"RAMESH","1980-01-  
17",5000,NULL);  
INSERT INTO EMP VALUES(102,"AJAY","1985-07-05",5000,500);  
INSERT INTO EMP VALUES(103,"RAVI","1981-08-12",1500,NULL);  
INSERT INTO EMP VALUES(104,"NIKESH","1983-03-03",3000,700);  
INSERT INTO EMP VALUES(105,"RAVI","1985-07-05",3000,NULL);
```

```
desc emp;
```

EMPNO	ENAME	HIREDATE	SALARY	COMM
101	RAMESH	1980-01-17T00:00:00.000Z	5000	
102	AJAY	1985-07-05T00:00:00.000Z	5000	500
103	RAVI	1981-08-12T00:00:00.000Z	1500	
104	NIKESH	1983-03-03T00:00:00.000Z	3000	700
105	RAVI	1985-07-05T00:00:00.000Z	3000	

2.

a. ALTER TABLE EMP ADD SAL INTEGER(7);

EMPNO	ENAME	HIREDATE	SALARY	COMM	SAL
101	RAMESH	1980-01-17T00:00:00.000Z	5000		

102	AJAY	1985-07-05T00:00:00.000Z	5000	500	
103	RAVI	1981-08-12T00:00:00.000Z	1500		
104	NIKESH	1983-03-03T00:00:00.000Z	3000	700	
105	RAVI	1985-07-05T00:00:00.000Z	3000		

b. ALTER TABLE EMP DROP SAL;

EMPNO	ENAME	HIREDATE	SALARY	COMM
101	RAMESH	1980-01-17T00:00:00.000Z	5000	
102	AJAY	1985-07-05T00:00:00.000Z	5000	500
103	RAVI	1981-08-12T00:00:00.000Z	1500	
104	NIKESH	1983-03-03T00:00:00.000Z	3000	700
105	RAVI	1985-07-05T00:00:00.000Z	3000	

c. ALTER TABLE EMP MODIFY ENAME VARCHAR(10);

d. ALTER TABLE EMP RENAME TO EMP1;

e. TRUNCATE TABLE EMP1;