

# **LAB-1**

## **EXPIRIMENT: 1**

- ✚ CREATE TABLE CUSTOMER (CNAME VARCHAR(15) PRIMARY KEY ,CITY VARCHAR(20) NOT NULL );
- ✚ CREATE TABLE BRANCH (BNAME VARCHAR(20) PRIMARY KEY,CITY VARCHAR(30) CHECK (CITY IN ('NAGPUR','DELHI','BANGALORE','BOMBAY')) NOT NULL);
- ✚ CREATE TABLE BORROW (LOANNO VARCHAR(8) PRIMARY KEY CHECK (LOANNO LIKE 'L%') ,CNAME VARCHAR(15),BNAME VARCHAR(20) ,AMOUNT FLOAT(8,2) NOT NULL CHECK (AMOUNT>0) , FOREIGN KEY (CNAME) REFERENCES CUSTOMER(CNAME), FOREIGN KEY (BNAME) REFERENCES BRANCH(BNAME));
- ✚ CREATE TABLE DEPOSIT (ACTNO VARCHAR(5) CHECK (ACTNO LIKE 'D%') PRIMARY KEY,CNAME VARCHAR(15),BNAME VARCHAR(20) ,AMOUNT FLOAT(8,2) CHECK (AMOUNT>0) NOT NULL, FOREIGN KEY (CNAME) REFERENCES CUSTOMER(CNAME), FOREIGN KEY (BNAME) REFERENCES BRANCH(BNAME));
  
- ✚ 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 DEPOSIT VALUES ('D100','ANIL','VRCE',1000.00,'1995-03-01');
✚ INSERT INTO DEPOSIT VALUES ('D101','SUNIL','ANJNI',500.00,'1996-01-04');
✚ INSERT INTO DEPOSIT VALUES ('D102','MEHUL','KAROLBAGH',3500.00,'1995-11-17');
✚ INSERT INTO DEPOSIT VALUES ('D104','MADHURI','CHANDNI',1200.00,'1995-12-17');
✚ INSERT INTO DEPOSIT VALUES ('D105','PRAMOD','MG ROAD',3000.00,'1996-03-27');
✚ INSERT INTO DEPOSIT VALUES ('D106','SANDIP','ANDHERI',2000.00,'1996-03-31');
✚ INSERT INTO DEPOSIT VALUES ('D107','SHIVANI','VIRAR',1000.00,'1995-09-05');
✚ INSERT INTO DEPOSIT VALUES ('D108','KRANTI','NEHRU PLACE 50',5000.00,'1995-07-05');
✚ INSERT INTO DEPOSIT VALUES ('D109','MINU','WAI',7000.00,'1995-08-01');

```

```

✚ 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 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');

```

## **EXPERIMENT:2**

1. SELECT \* FROM DEPOSIT;

```
mysql> select * from DEPOSIT;
```

ACTNO	CNAME	BNAME	AMOUNT	ADATE
D100	ANIL	VRCE	1000.00	1995-03-01
D101	SUNIL	ANJNI	500.00	1996-01-04
D102	MEHUL	KAROLBAGH	3500.00	1995-11-17
D104	MADHURI	CHANDNI	1200.00	1995-12-17
D105	PRAMOD	MG ROAD	3000.00	1996-03-27
D106	SANDIP	ANDHERI	2000.00	1996-03-31
D107	SHIVANI	VIRAR	1000.00	1995-09-05
D108	KRANTI	NEHRU PLACE 50	5000.00	1995-07-05
D109	MINU	WAI	7000.00	1995-08-01

9 rows in set (0.00 sec)

2. SELECT \* FROM BORROW;

```
mysql> select * from BORROW;
```

LOANNO	CNAME	BNAME	AMOUNT
L201	ANIL	VRCE	1000.00
L206	MEHUL	AJNI	5000.00
L311	SUNIL	DHARAMPETH	3000.00
L321	MADHURI	ANDHERI	2000.00
L371	PRAMOD	VIRAR	8000.00
L481	KRANTI	NEHRU PLACE	3000.00

6 rows in set (0.00 sec)

3. SELECT \* FROM CUSTOMER;

```
mysql> 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

10 rows in set (0.00 sec)

4. SELECT \* FROM BRANCH;

```
mysql> select * from BRANCH;
+-----+-----+
| BNAME      | CITY      |
+-----+-----+
| AJNI        | NAGPUR    |
| ANDHERI     | BOMBAY    |
| CHANDNI     | DELHI     |
| DHARAMPETH  | NAGPUR    |
| KAROLBAGH   | DELHI     |
| MG-ROAD     | BANGALORE |
| NEHRU-PALACE | DELHI     |
| POWAI       | BOMBAY    |
| VRCE        | NAGPUR    |
+-----+-----+
9 rows in set (0.00 sec)
```

5. SELECT ACTNO,AMOUNT FROM DEPOSIT;

```
mysql> SELECT ACTNO,AMOUNT FROM DEPOSIT;
+-----+-----+
| ACTNO | AMOUNT |
+-----+-----+
| D100  | 1000.00 |
| D101  | 500.00  |
| D102  | 3500.00 |
| D104  | 1200.00 |
| D105  | 3000.00 |
| D106  | 2000.00 |
| D107  | 1000.00 |
| D108  | 5000.00 |
| D109  | 7000.00 |
+-----+-----+
9 rows in set (0.00 sec)
```

6. SELECT CNAME,ACTNO FROM DEPOSIT;

```
mysql> SELECT CNAME,ACTNO FROM DEPOSIT;
+-----+-----+
| CNAME  | ACTNO |
+-----+-----+
| ANIL   | D100  |
| SUNIL  | D101  |
| MEHUL  | D102  |
| MADHURI | D104  |
| PRAMOD | D105  |
| SANDIP | D106  |
| SHIVANI | D107  |
| KRANTI | D108  |
| MINU   | D109  |
+-----+-----+
9 rows in set (0.00 sec)
```

## 7. SELECT CNAME FROM CUSTOMER;

```
mysql> SELECT CNAME FROM CUSTOMER;
```

CNAME
ANIL
KRANTI
MADHURI
MANDAR
MEHUL
NAREN
PRAMOD
SANDIP
SHIVANI
SUNIL

```
10 rows in set (0.00 sec)
```

## 8. SELECT BNAME FROM BRANCH;

```
mysql> SELECT BNAME FROM BRANCH;
```

BNAME
AJNI
ANDHERI
CHANDNI
DHARAMPETH
KAROLBAGH
MG-ROAD
NEHRU-PALACE
POWAI
VRCE

```
9 rows in set (0.00 sec)
```

## 9. SELECT CNAME FROM BORROW;

```
mysql> SELECT CNAME FROM BORROW;
```

CNAME
ANIL
MEHUL
SUNIL
MADHURI
PRAMOD
KRANTI

```
6 rows in set (0.00 sec)
```

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

```
mysql> SELECT CNAME FROM CUSTOMER WHERE CITY='NAGPUR';
```

CNAME
MADHURI
PRAMOD

```
2 rows in set (0.00 sec)
```

11.SELECT CNAME FROM DEPOSIT WHERE AMOUNT > 4000;

```
Error 1140 (42002): Table 'demo.deposit' doesn't exist
mysql> SELECT CNAME FROM DEPOSIT WHERE AMOUNT > 4000;
+-----+
| CNAME |
+-----+
| KRANTI |
| MINU  |
+-----+
2 rows in set (0.00 sec)
```

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

```
mysql> SELECT ADATE FROM DEPOSIT WHERE CNAME='ANIL';
+-----+
| ADATE |
+-----+
| 1995-03-01 |
+-----+
1 row in set (0.00 sec)
```

13.SELECT BNAME FROM BRANCH WHERE CITY='BOMBAY';

```
mysql> SELECT BNAME FROM BRANCH WHERE CITY='BOMBAY';
+-----+
| BNAME |
+-----+
| ANDHERI |
| POWAI  |
+-----+
2 rows in set (0.00 sec)
```

14.SELECT CNAME FROM BORROW WHERE LOANNO='L201';

```
mysql> SELECT CNAME FROM BORROW WHERE LOANNO='L201';
+-----+
| CNAME |
+-----+
| ANIL  |
+-----+
1 row in set (0.01 sec)
```

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

```
mysql> SELECT CNAME FROM DEPOSIT WHERE BNAME='VRCE';
+-----+
| CNAME |
+-----+
| ANIL  |
+-----+
1 row in set (0.00 sec)
```

16.SELECT BNAME FROM BRANCH WHERE CITY='DELHI';

```
mysql> SELECT BNAME FROM BRANCH WHERE CITY='DELHI';
+-----+
| BNAME      |
+-----+
| CHANDNI    |
| KAROLBAGH  |
| NEHRU-PALACE |
+-----+
3 rows in set (0.00 sec)
```

17.SELECT CNAME FROM DEPOSIT WHERE ADATE='1995-12-17';

```
mysql> SELECT CNAME FROM DEPOSIT WHERE ADATE='1995-12-17';
+-----+
| CNAME      |
+-----+
| MADHURI    |
+-----+
1 row in set (0.00 sec)

mysql> _
```

18.SELECT ACTNO,AMOUNT FROM DEPOSIT WHERE ADATE >='1995-12-01' AND ADATE <='1996-05-01';

```
mysql> SELECT ACTNO,AMOUNT FROM DEPOSIT WHERE ADATE >='1995-12-01' AND ADATE<='1996-05-01';
+-----+-----+
| ACTNO | AMOUNT |
+-----+-----+
| D101  | 500.00 |
| D104  | 1200.00 |
| D105  | 3000.00 |
| D106  | 2000.00 |
+-----+-----+
4 rows in set (0.00 sec)
```

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

```
mysql> SELECT CITY FROM BRANCH WHERE BNAME='KAROLBAGH';
+-----+
| CITY |
+-----+
| DELHI |
+-----+
1 row in set (0.00 sec)
```

20.SELECT D.ACTNO,D.CNAME,D.BNAME,D.AMOUNT,B.LOANNO,B.AMOUNT FROM DEPOSIT D,BORROW B WHERE B.CNAME='ANIL' AND D.CNAME='ANIL';

```
mysql> SELECT D.ACTNO,D.CNAME,D.BNAME,D.AMOUNT,B.LOANNO,B.AMOUNT FROM DEPOSIT D,BORROW B WHERE D.CNAME='ANIL'AND B.CNAME='ANIL';
+-----+-----+-----+-----+-----+-----+
| ACTNO | CNAME | BNAME | AMOUNT | LOANNO | AMOUNT |
+-----+-----+-----+-----+-----+-----+
| D100  | ANIL  | VRCE  | 1000.00 | L201   | 1000.00 |
+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)
```



## EXPERIMENT:3

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

```
✚ 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);
```

```
mysql> select * from emp;
```

EMPNO	ENAME	HIREDATE	SALARY	COMM
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

5 rows in set (0.02 sec)

```
ALTER TABLE EMP ADD SAL INTEGER(7);
```

```
mysql> ALTER TABLE EMP ADD SAL INTEGER(7);  
Query OK, 0 rows affected, 1 warning (0.02 sec)  
Records: 0 Duplicates: 0 Warnings: 1
```

```
mysql> select * from emp;
```

EMPNO	ENAME	HIREDATE	SALARY	COMM	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

5 rows in set (0.00 sec)

```
ALTER TABLE EMP DROP SAL;
```

```
mysql> ALTER TABLE EMP DROP SAL;  
Query OK, 0 rows affected (0.06 sec)  
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> select * from emp;
```

EMPNO	ENAME	HIREDATE	SALARY	COMM
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

5 rows in set (0.00 sec)

ALTER TABLE EMP MODIFY ENAME VARCHAR(10);

```
mysql> ALTER TABLE EMP MODIFY ENAME VARCHAR(10);
Query OK, 5 rows affected (0.05 sec)
Records: 5  Duplicates: 0  Warnings: 0

mysql> select * from emp;
+-----+-----+-----+-----+-----+
| EMPNO | ENAME | HIREDATE | SALARY | COMM |
+-----+-----+-----+-----+-----+
| 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 |
+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

ALTER TABLE EMP RENAME TO EMP1;

```
mysql> ALTER TABLE EMP RENAME TO EMP1;
Query OK, 0 rows affected (0.02 sec)

mysql> select * from emp;
ERROR 1146 (42S02): Table 'dbms.emp' doesn't exist
mysql> select * from emp1;
+-----+-----+-----+-----+-----+
| EMPNO | ENAME | HIREDATE | SALARY | COMM |
+-----+-----+-----+-----+-----+
| 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 |
+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

TRUNCATE TABLE EMP1;

```
mysql> TRUNCATE TABLE EMP1;
Query OK, 0 rows affected (0.03 sec)

mysql> select * from emp1;
Empty set (0.00 sec)

mysql>
```