ADBMS LAB WORK

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RMCA B-BATCH

Roll No : 28

EXPERIMENT: 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;

```
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   |
+---------+
 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>
```