ASSIGNMENT-2

DBMS LAB

SUBMITTED TO: SUBMITTED BY:

MERIN MANOJ   ALEENA JOSEPH

RMCA-BATCH A

ROLL.NO: 8

1. CREATING TABLES

mysql> CREATE TABLE branch(BNAME varchar(20)primary key,CITY varchar(20)not null CHECK(CITY IN('nagpur','delhi','bangalore','bombay')));

Query OK, 0 rows affected (1.08 sec)

mysql> CREATE TABLE customer(CNAME varchar(15)primary key,CITY varchar(20)not null);

Query OK, 0 rows affected (0.23 sec)

mysql> CREATE TABLE deposit(ACTNO varchar(20)primary key,CNAME varchar(15),foreign key(CNAME)REFERENCES customer(CNAME),BNAME varchar(20),foreign key(BNAME)REFERENCES branch(BNAME),amount varchar(5)not null);

Query OK, 0 rows affected (0.66 sec)

mysql> CREATE TABLE borrow(NOANNO varchar(8)primary key,AMOUNT varchar(6)not null,CNAME varchar(15),foreign key(CNAME)REFERENCES customer(CNAME),BNAME varchar(20),foreign key(BNAME)REFERENCES branch(BNAME));

Query OK, 0 rows affected (0.49 sec)

INSERTION OF VALUES

Branch

mysql> INSERT INTO branch VALUES('VRCE','nagpur');

Query OK, 1 row affected (0.12 sec)

mysql> INSERT INTO branch VALUES('AJNI','nagpur');

Query OK, 1 row affected (0.07 sec)

mysql> INSERT INTO branch VALUES('KAROLBAGH','delhi');

Query OK, 1 row affected (0.05 sec)

mysql> INSERT INTO branch VALUES('CHANDNI','delhi');

Query OK, 1 row affected (0.10 sec)

mysql> INSERT INTO branch VALUES('DHARAMPETH','nagpur');

Query OK, 1 row affected (0.06 sec)

mysql> INSERT INTO branch VALUES('MG ROAD','bangalore');

Query OK, 1 row affected (0.09 sec)

mysql> INSERT INTO branch VALUES('ANDHERI','bombay');

Query OK, 1 row affected (0.04 sec)

mysql> INSERT INTO branch VALUES('NEHRU PALACE','delhi');

Query OK, 1 row affected (0.08 sec)

mysql> INSERT INTO branch VALUES('POWAI','bombay');

Query OK, 1 row affected (0.06 sec)

Customer

mysql> INSERT INTO customer VALUES('ANIL','CALCUTTA');

Query OK, 1 row affected (0.32 sec)

mysql> INSERT INTO customer VALUES('SUNIL','DELHI');
Query OK, 1 row affected (0.07 sec)

mysql> INSERT INTO customer VALUES('MEHUL','BARODA');
Query OK, 1 row affected (0.05 sec)

mysql> INSERT INTO customer VALUES('MADHURI','PATNA');
Query OK, 1 row affected (0.08 sec)

mysql> INSERT INTO customer VALUES('MANDAR','NAGPUR');
Query OK, 1 row affected (0.07 sec)

mysql> INSERT INTO customer VALUES('PRAMOD','NAGPUR');
Query OK, 1 row affected (0.08 sec)

mysql> INSERT INTO customer VALUES('SANDIP','SURAT');
Query OK, 1 row affected (0.06 sec)

mysql> INSERT INTO customer VALUES('SHIVANI','BOMBAY');
Query OK, 1 row affected (0.09 sec)

mysql> INSERT INTO customer VALUES('KRANTI','BOMBAY');
Query OK, 1 row affected (0.05 sec)

mysql> INSERT INTO customer VALUES('NAREN','BOMBAY');

Query OK, 1 row affected (0.04 sec)

Deposit

mysql> INSERT INTO deposit VALUES('D100','ANIL','VRCE');

ERROR 1136 (21S01): Column count doesn't match value count at row 1

mysql> INSERT INTO deposit VALUES('D100','ANIL','VRCE','1000');

Query OK, 1 row affected (0.12 sec)

mysql> INSERT INTO deposit VALUES('D102','SUNIL','AJNI','500');

Query OK, 1 row affected (0.08 sec)

mysql> INSERT INTO deposit
VALUES('D103','MEHUL','KAROLBAGH','3500');

Query OK, 1 row affected (0.07 sec)

mysql> INSERT INTO deposit
VALUES('D104','MADHURI','CHANDNI','1200');

Query OK, 1 row affected (0.25 sec)

mysql> INSERT INTO deposit VALUES('D105','PRAMOD','MG
ROAD','3000');

Query OK, 1 row affected (0.10 sec)

mysql> INSERT INTO deposit
VALUES('D106','SANDIP','ANDHERI','2000');

Query OK, 1 row affected (0.10 sec)

mysql> INSERT INTO deposit VALUES('D107','SHIVANI','VRCE','1000');

Query OK, 1 row affected (0.06 sec)

mysql> INSERT INTO deposit VALUES('D108','KRANTI','NEHRU PALACE','5000');

Query OK, 1 row affected (0.16 sec)

mysql> INSERT INTO deposit VALUES('D109','ANIL','POWAI','7000');

Query OK, 1 row affected (0.06 sec)

Borrow

mysql> INSERT INTO borrow VALUES('L201','1000','ANIL','VRCE');

Query OK, 1 row affected (0.15 sec)

mysql> INSERT INTO borrow VALUES('L206','5000','MEHUL','AJNI');

Query OK, 1 row affected (0.08 sec)

mysql> INSERT INTO borrow VALUES('L311','3000','SUNIL','DHARAMPETH');

Query OK, 1 row affected (0.06 sec)

mysql> INSERT INTO borrow VALUES('L321','2000','MADHURI','ANDHERI');

Query OK, 1 row affected (0.07 sec)

mysql> INSERT INTO borrow VALUES('L371','8000','PRAMOD','VRCE');

Query OK, 1 row affected (0.11 sec)

mysql> INSERT INTO borrow VALUES('L481','3000','KRANTI','NEHRU PALACE');

Query OK, 1 row affected (0.09 sec)

2.SELECTING DATE FROM SINGLE TABLE

1)

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 (0.07 sec)

2)

customer

mysql> SELECT*FROM customer;

```
+---------+----------+
```

```
| CNAME   | CITY     |
+---------+----------+
| ANIL    | CALCUTTA |
| KRANTI  | BOMBAY   |
| MADHURI | PATNA    |
| MANDAR  | NAGPUR   |
| MEHUL   | BARODA   |
| NAREN   | BOMBAY   |
| PRAMOD  | NAGPUR   |
| SANDIP  | SURAT    |
| SHIVANI | BOMBAY   |
| SUNIL   | DELHI    |
+---------+----------+
10 rows in set (0.00 sec)
```

3)

deposit

```
mysql>  SELECT*FROM deposit;
+-------+---------+--------------+--------+
| ACTNO | CNAME   | BNAME        | amount |
+-------+---------+--------------+--------+
| D100  | ANIL    | VRCE         | 1000   |
| D102  | SUNIL   | AJNI         | 500    |
| D103  | MEHUL   | KAROLBAGH    | 3500   |
| D104  | MADHURI | CHANDNI      | 1200   |
| D105  | PRAMOD  | MG ROAD      | 3000   |
```

```
| D106  | SANDIP  | ANDHERI      | 2000   |
| D107  | SHIVANI | VRCE         | 1000   |
| D108  | KRANTI  | NEHRU PALACE | 5000   |
| D109  | ANIL    | POWAI        | 7000   |
+-------+---------+--------------+--------+
9 rows in set (0.00 sec)
```

4)

borrow

```
mysql> SELECT*FROM borrow;
+--------+--------+---------+--------------+
| NOANNO | AMOUNT | CNAME   | BNAME        |
+--------+--------+---------+--------------+
| L201   | 1000   | ANIL    | VRCE         |
| L206   | 5000   | MEHUL   | AJNI         |
| L311   | 3000   | SUNIL   | DHARAMPETH   |
| L321   | 2000   | MADHURI | ANDHERI      |
| L371   | 8000   | PRAMOD  | VRCE         |
| L481   | 3000   | KRANTI  | NEHRU PALACE |
+--------+--------+---------+--------------+
6 rows in set (0.00 sec)
```

5)

```
mysql> SELECT ACTNO,amount FROM deposit;
+-------+--------+
| ACTNO | amount |
```

```
+-------+--------+
| D100  | 1000   |
| D102  | 500    |
| D103  | 3500   |
| D104  | 1200   |
| D105  | 3000   |
| D106  | 2000   |
| D107  | 1000   |
| D108  | 5000   |
| D109  | 7000   |
+-------+--------+
```
9 rows in set (0.04 sec)

6)

mysql> SELECT ACTNO,CNAME FROM deposit;

```
+-------+---------+
| ACTNO | CNAME   |
+-------+---------+
| D100  | ANIL    |
| D109  | ANIL    |
| D108  | KRANTI  |
| D104  | MADHURI |
| D103  | MEHUL   |
| D105  | PRAMOD  |
| D106  | SANDIP  |
| D107  | SHIVANI |
| D102  | SUNIL   |
```

```
+-------+---------+
```
9 rows in set (0.04 sec)

7)

mysql> SELECT CNAME FROM customer;
```
+---------+
| CNAME   |
+---------+
| ANIL    |
| KRANTI  |
| MADHURI |
| MANDAR  |
| MEHUL   |
| NAREN   |
| PRAMOD  |
| SANDIP  |
| SHIVANI |
| SUNIL   |
+---------+
```
10 rows in set (0.00 sec)

8)

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)

```
mysql> SELECT CNAME FROM borrow;
+---------+
| CNAME   |
+---------+
| ANIL    |
| KRANTI  |
| MADHURI |
| MEHUL   |
| PRAMOD  |
| SUNIL   |
+---------+
6 rows in set (0.00 sec)
```

10)

mysql> SELECT CNAME FROM customer WHERE CITY="NAGPUR";

+--------+

| CNAME |

+--------+

| MANDAR |

| PRAMOD |

+--------+

2 rows in set (0.00 sec)

11)

mysql> SELECT CNAME FROM deposit WHERE amount>4000;

+--------+

| CNAME |

+--------+

| KRANTI |

| ANIL |

+--------+

2 rows in set (0.05 sec)

12)

mysql> SELECT ADATE FROM deposit WHERE CNAME="ANIL";

+------------+

| ADATE |

+------------+

| 0000-00-00 |

| 0000-00-00 |

+------------+

2 rows in set (0.03 sec)

13)

mysql> SELECT BNAME FROM branch WHERE CITY="BOMBAY";

+---------+

| BNAME |

+---------+

| ANDHERI |

| POWAI |

+---------+

2 rows in set (0.00 sec)

14)

mysql> SELECT CNAME FROM borrow WHERE NOANNO="L205";

Empty set (0.08 sec)

15)

mysql> SELECT CNAME FROM deposit WHERE BNAME="VRCE";

+---------+

| CNAME |

```
+---------+
| ANIL    |
| SHIVANI |
+---------+
2 rows in set (0.03 sec)
```

16)

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

17)

```
mysql> select CNAME FROM deposit WHERE ADATE="1991-03-01";
+-------+
| CNAME |
+-------+
| ANIL  |
+-------+
1 row in set (0.00 sec)
```

18)

mysql> select ACTNO,amount from deposit where ADATE="1996-11-17"and"1996-03-07";

Empty set, 1 warning (0.00 sec)

19)

mysql> select CITY from branch where BNAME="KAROLBAGH";

```
+-------+
| CITY  |
+-------+
| delhi |
+-------+
```

1 row in set (0.03 sec)

3.DDL COMMANDS

1)

mysql> create table EMPLOYEE(empno varchar(5)primary key,ename varchar(25)not null,hiredate date,salary varchar(5)not null,commission varchar(5)not null);

Query OK, 0 rows affected (1.20 sec) mysql> create table EMPLOYEE(empno varchar(5)primary key,ename varchar(25)not null,hiredate date,salary varchar(5)not null,commission varchar(5)not null);
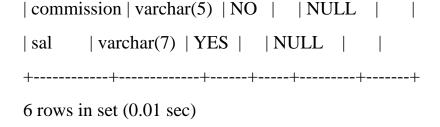
Query OK, 0 rows affected (1.20 sec)

mysql> desc EMPLOYEE;

```
+------------+-------------+------+-----+---------+-------+
```

```
| Field      | Type        | Null | Key | Default | Extra |
+-----------+------------+------+-----+---------+-------+
| empno      | varchar(5)  | NO   | PRI | NULL    |       |
| ename      | varchar(25) | NO   |     | NULL    |       |
| hiredate   | date        | YES  |     | NULL    |       |
| salary     | varchar(5)  | NO   |     | NULL    |       |
| commission | varchar(5)  | NO   |     | NULL    |       |
+-----------+------------+------+-----+---------+-------+
5 rows in set (0.35 sec)
```

mysql> insert into EMPLOYEE values('101','ramesh','1980-01-17','5000','500');
Query OK, 1 row affected (0.13 sec)

mysql> insert into EMPLOYEE values('102','ajay','1985-07-05','5000','500');
Query OK, 1 row affected (0.07 sec)

mysql> insert into EMPLOYEE values('103','ravi','1981-08-12','1500','700');
Query OK, 1 row affected (0.06 sec)

mysql> insert into EMPLOYEE values('104','nikesh','1983-03-03','3000','700');
Query OK, 1 row affected (0.08 sec)

mysql> insert into EMPLOYEE values('105','ravi','1985-07-05','3000','600');
Query OK, 1 row affected (0.04 sec)

mysql> select*from EMPLOYEE;

```
+-------+--------+------------+--------+------------+
| empno | ename  | hiredate   | salary | commission |
+-------+--------+------------+--------+------------+
| 101   | ramesh | 1980-01-17 | 5000   | 500        |
| 102   | ajay   | 1985-07-05 | 5000   | 500        |
| 103   | ravi   | 1981-08-12 | 1500   | 700        |
| 104   | nikesh | 1983-03-03 | 3000   | 700        |
| 105   | ravi   | 1985-07-05 | 3000   | 600        |
+-------+--------+------------+--------+------------+
```
5 rows in set (0.06 sec)

2)

Modify table structure:

   a) Adding new column

mysql> alter table EMPLOYEE add sal varchar(7);

Query OK, 0 rows affected (1.64 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> desc EMPLOYEE;

```
+------------+-------------+------+-----+---------+-------+
| Field      | Type        | Null | Key | Default | Extra |
+------------+-------------+------+-----+---------+-------+
| empno      | varchar(5)  | NO   | PRI | NULL    |       |
| ename      | varchar(25) | NO   |     | NULL    |       |
| hiredate   | date        | YES  |     | NULL    |       |
| salary     | varchar(5)  | NO   |     | NULL    |       |
```

```
| commission | varchar(5) | NO  |     | NULL    |       |
| sal        | varchar(7) | YES |     | NULL    |       |
+------------+------------+------+-----+---------+-------+
```
6 rows in set (0.01 sec)

b) Dropping a column

mysql> alter table EMPLOYEE drop column sal;

Query OK, 0 rows affected (1.43 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> desc EMPLOYEE;

```
+------------+-------------+------+-----+---------+-------+
| Field      | Type        | Null | Key | Default | Extra |
+------------+-------------+------+-----+---------+-------+
| empno      | varchar(5)  | NO   | PRI | NULL    |       |
| ename      | varchar(25) | NO   |     | NULL    |       |
| hiredate   | date        | YES  |     | NULL    |       |
| salary     | varchar(5)  | NO   |     | NULL    |       |
| commission | varchar(5)  | NO   |     | NULL    |       |
+------------+-------------+------+-----+---------+-------+
```
    5   rows in set (0.07 sec)

c) Modifying existing column

mysql> alter table EMPLOYEE modify ename varchar(15);

Query OK, 5 rows affected (1.23 sec)

Records: 5 Duplicates: 0 Warnings: 0

```
mysql> desc EMPLOYEE;

+------------+-------------+------+-----+---------+-------+
| Field      | Type        | Null | Key | Default | Extra |
+------------+-------------+------+-----+---------+-------+
| empno      | varchar(5)  | NO   | PRI | NULL    |       |
| ename      | varchar(15) | YES  |     | NULL    |       |
| hiredate   | date        | YES  |     | NULL    |       |
| salary     | varchar(5)  | NO   |     | NULL    |       |
| commission | varchar(5)  | NO   |     | NULL    |       |
+------------+-------------+------+-----+---------+-------+
5 rows in set (0.23 sec)
```

d) Rename the table name

mysql> alter table EMPLOYEE rename EMP2;

Query OK, 0 rows affected (0.31 sec)

e) Truncating table

mysql> truncate table EMP2;

Query OK, 0 rows affected (0.51 sec)

f) Destroting table

mysql> drop table EMP2;

Query OK, 0 rows affected (0.35 sec)

3)

Create table stud:

mysql> create table stud(sname varchar(20)primary key,rollno varchar(10)not null,dob date not null);

Query OK, 0 rows affected (0.46 sec)

mysql> desc stud;

+--------+-------------+------+-----+---------+-------+
| Field | Type | Null | Key | Default | Extra |
+--------+-------------+------+-----+---------+-------+
sname	varchar(20)	NO	PRI	NULL	
rollno	varchar(10)	NO		NULL	
dob	date	NO		NULL	
+--------+-------------+------+-----+---------+-------+

3 rows in set (0.18 sec)

4) create table and use check constrain:

mysql> Create table student (regno int, mark int(3) constraint b check (mark >=0 and mark <=100));

Query OK, 0 rows affected, 1 warning (1.40 sec)

mysql> desc student;

+-------+------+------+-----+---------+-------+
| Field | Type | Null | Key | Default | Extra |
+-------+------+------+-----+---------+-------+
| regno | int | YES | | NULL | |
| mark | int | YES | | NULL | |
+-------+------+------+-----+---------+-------+

2 rows in set (0.30 sec)

mysql> Alter table student add regno check (length(regno<=4));

5)create table cust:

mysql> CREATE TABLE cust(custid varchar(6) UNIQUE, name varchar(10));

Query OK, 0 rows affected (0.47 sec)

mysql> desc cust;

```
+--------+-------------+------+-----+---------+-------+
| Field  | Type        | Null | Key | Default | Extra |
+--------+-------------+------+-----+---------+-------+
| custid | varchar(6)  | YES  | UNI | NULL    |       |
| name   | varchar(10) | YES  |     | NULL    |       |
+--------+-------------+------+-----+---------+-------+
```

2 rows in set (0.14 sec)