

Experiment No: 8

Title : • Study & Implementation of different types of constraints

Objective:

To practice and implement constraints

LAB PRACTICE ASSIGNMENT:

1. Create a table called EMP with the following structure.

Name Type

```
-----  
EMPNO NUMBER (6)  
ENAME VARCHAR2 (20)  
JOB VARCHAR2 (10)  
DEPTNO NUMBER (3) SAL  
NUMBER (7,2)
```

Allow NULL for all columns except ename and job.

2. Add constraints to check, while entering the empno value (i.e) empno > 100.
3. Define the field DEPTNO as unique.
4. Create a primary key constraint for the table(EMPNO).

```
mysql> CREATE TABLE EMP1 (  
-> EMPNO INT(6) CHECK (EMPNO > 100),  
-> ENAME VARCHAR(20) NOT NULL,  
-> JOB VARCHAR(10) NOT NULL,  
-> DEPTNO INT(3) UNIQUE,  
-> SAL DECIMAL(7, 2),  
-> PRIMARY KEY (EMPNO)  
-> );  
Query OK, 0 rows affected, 2 warnings (0.05 sec)
```

5. Write queries to implement and practice constraints.

```
mysql> INSERT INTO EMP1 (EMPNO, ENAME, JOB, DEPTNO, SAL) VALUES (101, 'John Doe', 'Manager', 10, 75000.00);  
Query OK, 1 row affected (0.01 sec)  
  
mysql> INSERT INTO EMP1 (EMPNO, ENAME, JOB, DEPTNO, SAL) VALUES (102, 'Jane Smith', 'Developer', 20, 65000.00);  
Query OK, 1 row affected (0.01 sec)  
  
mysql> -- This should fail  
mysql> INSERT INTO EMP1 (EMPNO, ENAME, JOB, DEPTNO, SAL) VALUES (99, 'Invalid Emp', 'Tester', 30, 60000.00);  
ERROR 3819 (HY000): Check constraint 'empl_chk_1' is violated.  
mysql> -- Insert DEPTNO = 10  
mysql> INSERT INTO EMP1(EMPNO, ENAME, JOB, DEPTNO, SAL) VALUES (103, 'Alice Brown', 'Analyst', 10, 55000.00);  
ERROR 1062 (23000): Duplicate entry '10' for key 'emp1.DEPTNO'
```