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Experiment No: 3

AIM:

1.Create a table emp with attributes empno number(4)as primary key, ename char(10),hiredate, salary, commission
insert 5 rows of data

101	Ramesh	17-Jan-1980	5000	;
102	Ajay	05-Jul-1985	5000	500;
103	Ravi	12-Aug-1981	1500	;
104	Nikesh	03-Mar-1983	3000	700;
105	Ravi	05-jul-1985	3000;	

2.Modifying the structure of tables
>   a.Add new columns: sal number(7,2)
>   b.Dropping a column from a table: sal
>   c.Modifying existing column :ename varchar2(15)
>   d.Renaming the tables: emp to emp1
>   e.truncating the tables:emp1
>   f.Destroying tables:emp

3.Create a table stud with sname varchar2(20) primary key , rollno number(10) not null,dob date not null
4.Create a table student as regno number (6), mark number (3) check constraint (mark >=0 and mark <=100));
In table student add check constraint(length(regno<=4))
5.Create a table cust with(custid number(6) constraint unique, name char(10)
6. Refer the table "stud" in table " student"

SQL Commands:

CREATE TABLE emp(EMPNO INT(4) PRIMARY KEY, ENAME CHAR(10), HIREDATE DATE, SALARY INT(5), COMMISSION INT(5));

INSERT INTO emp(EMPNO,ENAME,HIREDATE,SALARY) VALUES
  (101,'RAMESH','1980-01-17',5000),(102,'AJAY','1985-07-05',5000,500),
  (103,'RAVI','1981-08-12',1500),(104,'Nikesh','1983-03-03',3000,700),
  (105,'Ravi','1985-07-05',3000);

ALTER TABLE emp ADD sal int;

ALTER TABLE emp DROP COLUMN sal;

ALTER TABLE emp MODIFY ename VARCHAR(15);

RENAME table emp to emp1;

TRUNCATE TABLE emp1;

DROP TABLE emp1;

CREATE TABLE stud(sname varchar(20) PRIMARY KEY, rollno int NOT NULL, dob date NOT NULL);
SELECT * FROM stud;

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

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

CREATE TABLE cust(custid number(6) UNIQUE, name char(10));

OUTPUT:

mysql> CREATE TABLE emp(EMPNO NUMBER(4) PRIMARY KEY,
    ->   ENAME CHAR(10),
    ->   HIREDATE DATE,
    ->   SALARY NUMBER(5),
    ->   COMMISSION NUMBER(5));
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'NUMBER(4) PRIMARY KEY,
      ENAME CHAR(10),
      HIREDATE ' at line 1
mysql> CREATE TABLE emp(EMPNO INT(4) PRIMARY KEY,
    ->   ENAME CHAR(10),
    ->   HIREDATE DATE,
    ->   SALARY NUMBER(5),
    ->   COMMISSION NUMBER(5));
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'NUMBER(5),
      COMMISSION NUMBER(5))' at line 4
mysql> CREATE TABLE emp(EMPNO INT(4) PRIMARY KEY,
    ->   ENAME CHAR(10),
    ->   HIREDATE DATE,
    ->   SALARY INT(5),
    ->   COMMISSION NUMBER(5));
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'NUMBER(5))' at line 5
mysql> CREATE TABLE emp(EMPNO INT(4) PRIMARY KEY,
    ->   ENAME CHAR(10),
    ->   HIREDATE DATE,
    ->   SALARY INT(5),
    ->   COMMISSION INT(5));
Query OK, 0 rows affected, 3 warnings (0.04 sec)

mysql> INSERT INTO emp VALUES(101,'RAMESH','17-01-1980',5000);
ERROR 1136 (21S01): Column count doesn't match value count at row 1
mysql> INSERT INTO emp VALUES(102,'AJAY','05-07-1985',5000,500);
ERROR 1292 (22007): Incorrect date value: '05-07-1985' for column 'HIREDATE' at row 1
mysql> INSERT INTO emp VALUES(103,'RAVI','12-08-1981',1500);
ERROR 1136 (21S01): Column count doesn't match value count at row 1
mysql> INSERT INTO emp VALUES(104,'03-03-1983',3000,700);
ERROR 1136 (21S01): Column count doesn't match value count at row 1
mysql> INSERT INTO emp VALUES(101,'RAMESH','17-01-1980',5000);
ERROR 1136 (21S01): Column count doesn't match value count at row 1
mysql> INSERT INTO emp(EMPNO,ENAME,HIREDATE,SALARY) VALUES(101,'RAMESH','17-01-1980',5000);
ERROR 1292 (22007): Incorrect date value: '17-01-1980' for column 'HIREDATE' at row 1
mysql> INSERT INTO emp(EMPNO,ENAME,HIREDATE,SALARY) VALUES(101,'RAMESH','1980-01-17',5000);
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO emp(EMPNO,ENAME,HIREDATE,SALARY,COMMISSION) VALUES(102,'AJAY','05-07-1985',5000,500);
ERROR 1292 (22007): Incorrect date value: '05-07-1985' for column 'HIREDATE' at row 1
mysql> INSERT INTO emp(EMPNO,ENAME,HIREDATE,SALARY,COMMISSION) VALUES(102,'AJAY','1985-07-05',5000,500);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO emp(EMPNO,ENAME,HIREDATE,SALARY) VALUES(103,'RAVI','1981-08-12',1500);
Query OK, 1 row affected (0.01 sec)

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mysql> INSERT INTO emp(EMPNO,HIREDATE,SALARY,COMMISSION) VALUES(104,'Nikesh','1983-03-
03',3000,700);
ERROR 1136 (21S01): Column count doesn't match value count at row 1
mysql> INSERT INTO emp(EMPNO,ENAME,HIREDATE,SALARY,COMMISSION) VALUES(104,'Nikesh','1983-
03-03',3000,700);
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO emp(EMPNO,ENAME,HIREDATE,SALARY) VALUES(105,'Ravi','1985-07-05',3000);
Query OK, 1 row affected (0.01 sec)

mysql> ALTER TABLE emp ADD sal number(7,2);
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your
MySQL server version for the right syntax to use near 'number(7,2)' at line 1
mysql> ALTER TABLE emp ADD sal int;
Query OK, 0 rows affected (0.03 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> select * from emp
    -> select * from emp;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your
MySQL server version for the right syntax to use near 'select * from emp' at line 2
mysql> select * from emp;
+-------+--------+------------+--------+------------+------+
| EMPNO | ENAME  | HIREDATE   | SALARY | COMMISSION | 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)

mysql> ALTER TABLE emp DROP COLUMN sal;
Query OK, 0 rows affected (0.06 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> select * from emp;
+-------+--------+------------+--------+------------+
| EMPNO | ENAME  | HIREDATE   | SALARY | COMMISSION |
+-------+--------+------------+--------+------------+
|   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)

mysql> ALTER TABLE emp MODIFY ename VARCHAR2(15);
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your
MySQL server version for the right syntax to use near 'VARCHAR2(15)' at line 1
mysql> ALTER TABLE emp MODIFY ename VARCHAR(15);
Query OK, 5 rows affected (0.06 sec)
Records: 5  Duplicates: 0  Warnings: 0

mysql> select * from emp;
+-------+--------+------------+--------+------------+
| EMPNO | ename  | HIREDATE   | SALARY | COMMISSION |
+-------+--------+------------+--------+------------+
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|   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)

mysql> RENAME emp to emp1;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your
MySQL server version for the right syntax to use near 'emp to emp1' at line 1
mysql> RENAME table emp to emp1;
Query OK, 0 rows affected (0.02 sec)

mysql> select * from emp;
ERROR 1146 (42S02): Table 'dbmsassignment.emp' doesn't exist
mysql> select * from emp1;
+-------+--------+------------+--------+------------+
| EMPNO | ename  | HIREDATE   | SALARY | COMMISSION |
+-------+--------+------------+--------+------------+
|   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)

mysql> TRUNCATE TABLE emp1;
Query OK, 0 rows affected (0.03 sec)

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

mysql> desc emp1;
+------------+-------------+------+-----+---------+-------+
| Field      | Type        | Null | Key | Default | Extra |
+------------+-------------+------+-----+---------+-------+
| EMPNO      | int         | NO   | PRI | NULL    |       |
| ename      | varchar(15) | YES  |     | NULL    |       |
| HIREDATE   | date        | YES  |     | NULL    |       |
| SALARY     | int         | YES  |     | NULL    |       |
| COMMISSION | int         | YES  |     | NULL    |       |
+------------+-------------+------+-----+---------+-------+
5 rows in set (0.01 sec)

mysql> DROP TABLE emp1;
Query OK, 0 rows affected (0.03 sec)

mysql> desc emp1;
ERROR 1146 (42S02): Table 'dbmsassignment.emp1' doesn't exist
mysql>
mysql> CREATE TABLE stud(sname varchar(20) PRIMARY KEY,
    ->          rollno  NOT NULL,
    ->          dob date NOT NULL);
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your
MySQL server version for the right syntax to use near 'NOT NULL,
          dob date NOT NULL)' at line 2
mysql> CREATE TABLE stud(sname varchar(20) PRIMARY KEY,
    -> CREATE TABLE stud(sname varchar(20) PRIMARY KEY,
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    ->          rollno  NOT NULL,
    -> desc emp1;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your
MySQL server version for the right syntax to use near 'CREATE TABLE stud(sname varchar(20) PRIMARY
KEY,
          rollno  NOT ' at line 2
mysql>
mysql> CREATE TABLE stud(sname varchar(20) PRIMARY KEY,
    ->          rollno int NOT NULL,
    ->          dob date NOT NULL);
Query OK, 0 rows affected (0.04 sec)

mysql> Create table student (regno number (6),
    ->          mark number (3) constraint b check (mark >=0 and mark <=100));
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your
MySQL server version for the right syntax to use near 'number (6),
          mark number (3) constraint b check (mark >=0 an' at line 1
mysql> Alter table student add constraint b2 check (length(regno<=4));
ERROR 1146 (42S02): Table 'dbmsassignment.student' doesn't exist
mysql> Create table student (regno int,
    ->          mark int(3) constraint b check (mark >=0 and mark <=100));
Query OK, 0 rows affected, 1 warning (0.03 sec)

mysql> select * from student;
Empty set (0.02 sec)

mysql> desc student;
+-------+------+------+-----+---------+-------+
| Field | Type | Null | Key | Default | Extra |
+-------+------+------+-----+---------+-------+
| regno | int  | YES  |     | NULL    |       |
| mark  | int  | YES  |     | NULL    |       |
+-------+------+------+-----+---------+-------+
2 rows in set (0.01 sec)

mysql> Alter table student add constraint b2 check (length(regno<=4));
ERROR 3812 (HY000): An expression of non-boolean type specified to a check constraint 'b2'.
mysql> Alter table student add regno check (length(regno<=4));
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your
MySQL server version for the right syntax to use near 'check (length(regno<=4))' at line 1
mysql> Alter table student set regno check (length(regno<=4));
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your
MySQL server version for the right syntax to use near 'set regno check (length(regno<=4))' at line 1
mysql> alter table student add constraint b2 check (length(regno<=4));
ERROR 3812 (HY000): An expression of non-boolean type specified to a check constraint 'b2'.
mysql> select * from student;
Empty set (0.00 sec)

mysql> desc student;
+-------+------+------+-----+---------+-------+
| Field | Type | Null | Key | Default | Extra |
+-------+------+------+-----+---------+-------+
| regno | int  | YES  |     | NULL    |       |
| mark  | int  | YES  |     | NULL    |       |
+-------+------+------+-----+---------+-------+
2 rows in set (0.00 sec)

mysql> Alter table student CHECK (regno IN (length(regno<=4)));
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your
MySQL server version for the right syntax to use near '(regno IN (length(regno<=4)))' at line 1
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mysql> Alter table student CHECK (regno(length(regno<=4)));
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your
MySQL server version for the right syntax to use near '(regno(length(regno<=4)))' at line 1
mysql>
```