Institute of Engineering & Technology

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Department of Computer Science & Engineering

DATABASE MANAGEMENT SYSTEM(CER4C4)

Lab Assignment-3

Submitted To: **Submitted By:**

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Lab Assignment-3

➢ **Create one table employee with fields**
  - **Eno - primary key and apply sequence starts with 101**
  - **Ename - not null**
  - **Address - default 'Nashik'**
  - **Joindate**
  - **Post**
  - **Salary - check > 5000**

Query:-

(I) CREATE TABLE employee

  ➔ (
  ➔ Eno int NOT NULL PRIMARY KEY AUTO_INCREMENT,
  ➔ Ename varchar(25) NOT NULL,
  ➔ Address varchar(25) DEFAULT 'Nashik',
  ➔ Joindate DATE,
  ➔ Post varchar(25),
  ➔ Salary int CHECK(Salary > 5000)
  ➔);

(II) ALTER TABLE employee

➔ AUTO_INCREMENT = 101;

(III) DESC employee;

```
mysql> CREATE TABLE employee
    -> (
    -> Eno int NOT NULL PRIMARY KEY AUTO_INCREMENT,
    -> Ename varchar(25) NOT NULL,
    -> Address varchar(25) DEFAULT 'Nashik',
    -> Joindate DATE,
    -> Post varchar(25),
    -> Salary int CHECK(Salary > 5000)
    -> );
Query OK, 0 rows affected (0.05 sec)

mysql> ALTER TABLE employee AUTO_INCREMENT = 101;
Query OK, 0 rows affected (0.02 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> DESC employee;
+----------+-------------+------+-----+---------+----------------+
| Field    | Type        | Null | Key | Default | Extra          |
+----------+-------------+------+-----+---------+----------------+
| Eno      | int         | NO   | PRI | NULL    | auto_increment |
| Ename    | varchar(25) | NO   |     | NULL    |                |
| Address  | varchar(25) | YES  |     | Nashik  |                |
| Joindate | date        | YES  |     | NULL    |                |
| Post     | varchar(25) | YES  |     | NULL    |                |
| Salary   | int         | YES  |     | NULL    |                |
+----------+-------------+------+-----+---------+----------------+
6 rows in set (0.01 sec)
```

➢ **Create another table emp_proj with fields**
- **Eno - foreign key**
- **Project_name**
- **Loc**

Query:-

(I) CREATE TABLE emp_proj
➔ (
➔ Eno int PRIMARY KEY,
➔ Project_name varchar(25),
➔ Loc varchar(25),
➔ FOREIGN KEY (Eno) REFERENCE employee(Eno)
➔);

(II) DESC emp_proj;

```
mysql> CREATE TABLE emp_proj
    -> (
    -> Eno int PRIMARY KEY,
    -> Project_name varchar(25),
    -> Loc varchar(25),
    -> FOREIGN KEY (Eno) REFERENCES employee(Eno)
    -> );
Query OK, 0 rows affected (0.04 sec)

mysql> DESC emp_proj;
+--------------+-------------+------+-----+---------+-------+
| Field        | Type        | Null | Key | Default | Extra |
+--------------+-------------+------+-----+---------+-------+
| Eno          | int         | NO   | PRI | NULL    |       |
| Project_name | varchar(25) | YES  |     | NULL    |       |
| Loc          | varchar(25) | YES  |     | NULL    |       |
+--------------+-------------+------+-----+---------+-------+
3 rows in set (0.01 sec)
```

➢ **Create Index on Ename field of employee table.**

Query:-

(I)   CREATE INDEX DEMOINDEX
➔ ON employee(Ename);

(II)   SHOW INDEXES FROM employee;

(III)   DESC employee;

```
mysql> CREATE INDEX DEMOINDEX
    -> ON employee(Ename);
Query OK, 0 rows affected (0.04 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> SHOW INDEXES FROM employee;
+----------+------------+------------+--------------+-------------+-----------+-------------+----------+--------+------+------------+---------+---------------+---------+-----------+
| Table    | Non_unique | Key_name   | Seq_in_index | Column_name | Collation | Cardinality | Sub_part | Packed | Null | Index_type | Comment | Index_comment | Visible | Expression |
+----------+------------+------------+--------------+-------------+-----------+-------------+----------+--------+------+------------+---------+---------------+---------+-----------+
| employee |          0 | PRIMARY    |            1 | Eno         | A         |           0 |     NULL |   NULL |      | BTREE      |         |               | YES     | NULL      |
| employee |          1 | DEMOINDEX  |            1 | Ename       | A         |           0 |     NULL |   NULL |      | BTREE      |         |               | YES     | NULL      |
+----------+------------+------------+--------------+-------------+-----------+-------------+----------+--------+------+------------+---------+---------------+---------+-----------+
2 rows in set (0.01 sec)

mysql> DESC employee;
+----------+-------------+------+-----+---------+----------------+
| Field    | Type        | Null | Key | Default | Extra          |
+----------+-------------+------+-----+---------+----------------+
| Eno      | int         | NO   | PRI | NULL    | auto_increment |
| Ename    | varchar(25) | NO   | MUL | NULL    |                |
| Address  | varchar(25) | YES  |     | Nashik  |                |
| Joindate | date        | YES  |     | NULL    |                |
| Post     | varchar(25) | YES  |     | NULL    |                |
| Salary   | int         | YES  |     | NULL    |                |
+----------+-------------+------+-----+---------+----------------+
6 rows in set (0.00 sec)
```