Module3 – Mini Project #1 – DEPARTMENT/EMPLOYEE DATABASE

STEP 1:

```
mysql> CREATE SCHEMA IF NOT EXISTS `mod3-miniproj1`
    -> ;
Query OK, 1 row affected (0.01 sec)
```

```
mysql> CREATE TABLE `mod3-miniproj1`.`departments` (  `id` INT NOT NULL AUTO_INCREMENT,  `name` VARCHAR(45) NOT NULL,  PRIMARY KEY (`id`));
Query OK, 0 rows affected (0.03 sec)
```

STEP 2:

```
mysql> CREATE TABLE `mod3-miniproj1`.`employees` (  `id` INT NOT NULL AUTO_INCREMENT,  `name` VARCHAR(45) NOT NULL,  `departmentID` INT NOT
NULL,  PRIMARY KEY (`id`),  INDEX `departmentID_idx` (`departmentID` ASC) VISIBLE,  CONSTRAINT `departmentID`    FOREIGN KEY (`departmentID`
)    REFERENCES `mini1`.`departments` (`id`)    ON DELETE CASCADE    ON UPDATE NO ACTION);
Query OK, 0 rows affected (0.04 sec)
```

STEP 3:

```
mysql> INSERT INTO `mod3-miniproj1`.`departments` (`name`) VALUES ('Finance');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO `mod3-miniproj1`.`departments` (`name`) VALUES ('Marketing');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO `mod3-miniproj1`.`departments` (`name`) VALUES ('Technology');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> SELECT * FROM `mod3-miniproj1`.departments;
+----+------------+
| id | name       |
+----+------------+
|  1 | Finance    |
|  2 | Marketing  |
|  3 | Technology |
+----+------------+
3 rows in set (0.00 sec)
```

```
mysql> INSERT INTO `mod3-miniproj1`.`employees` (`name`, `departmentID`) VALUES ('Billy Bob', '1');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO `mod3-miniproj1`.`employees` (`name`, `departmentID`) VALUES ('Jane Doe', '2');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO `mod3-miniproj1`.`employees` (`name`, `departmentID`) VALUES ('Mary Smith', '3');
Query OK, 1 row affected (0.00 sec)

mysql> SELECT * FROM `mod3-miniproj1`.employees;
+----+------------+--------------+
| id | name       | departmentID |
+----+------------+--------------+
|  1 | Billy Bob  |            1 |
|  2 | Jane Doe   |            2 |
|  3 | Mary Smith |            3 |
+----+------------+--------------+
3 rows in set (0.00 sec)
```

STEP 4:

```
mysql> ALTER TABLE `mod3-miniproj1`.`employees`
    -> ADD COLUMN `salary` INT NOT NULL;
Query OK, 0 rows affected (0.02 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

```
mysql> SELECT * FROM `mod3-miniproj1`.employees;
+----+------------+--------------+--------+
| id | name       | departmentID | salary |
+----+------------+--------------+--------+
|  1 | Billy Bob  |            1 |      0 |
|  2 | Jane Doe   |            2 |      0 |
|  3 | Mary Smith |            3 |      0 |
+----+------------+--------------+--------+
```

STEP 5:

// inserted more to show deletion of just one department first

```
mysql> INSERT INTO `mod3-miniproj1`.`employees` (`name`, `departmentID`, `salary`) VALUES ('Shirley Grave', '1', '100000');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO `mod3-miniproj1`.`employees` (`name`, `departmentID`, `salary`) VALUES ('Bobby Bob', '1', '200000');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO `mod3-miniproj1`.`employees` (`name`, `departmentID`, `salary`) VALUES ('Chris Jones', '1', '340000');
Query OK, 1 row affected (0.01 sec)
```

```
mysql> SELECT * FROM `mod3-miniproj1`.employees;
+----+---------------+--------------+--------+
| id | name          | departmentID | salary |
+----+---------------+--------------+--------+
|  1 | Billy Bob     |            1 |      0 |
|  2 | Jane Doe      |            2 |      0 |
|  3 | Mary Smith    |            3 |      0 |
|  4 | Shirley Grave |            1 | 100000 |
|  5 | Bobby Bob     |            1 | 200000 |
|  6 | Chris Jones   |            1 | 340000 |
+----+---------------+--------------+--------+
6 rows in set (0.00 sec)
```

```
mysql> DELETE FROM `mod3-miniproj1`.`departments` WHERE (`id` = '1');
Query OK, 1 row affected (0.01 sec)

mysql> SELECT * FROM `mod3-miniproj1`.employees;
+----+------------+--------------+--------+
| id | name       | departmentID | salary |
+----+------------+--------------+--------+
|  2 | Jane Doe   |            2 |      0 |
|  3 | Mary Smith |            3 |      0 |
+----+------------+--------------+--------+
2 rows in set (0.00 sec)
```

//now to delete all departments, the employee table should be empty after

```
mysql> DELETE FROM `mod3-miniproj1`.`departments` WHERE (`id` = '2');
Query OK, 1 row affected (0.01 sec)

mysql> DELETE FROM `mod3-miniproj1`.`departments` WHERE (`id` = '3');
Query OK, 1 row affected (0.01 sec)
```

STEP 6:

```
mysql> SELECT * FROM `mod3-miniproj1`.departments;
Empty set (0.00 sec)

mysql> SELECT * FROM `mod3-miniproj1`.employees;
Empty set (0.00 sec)
```