

College of Engineering and Information Technology

**Database for Management (INT 302)**

1st Summer semester 2022/2023

Model Answer for Lab # 10

How to create table in SQL:

CREATE TABLEtable\_name (

column\_1 data\_type column\_constraint,

column\_2 data\_type column\_constraint,

...

table\_constraint

);

The Insert Statement:

The INSERT INTO statement is used to insert new records in a table

The general syntax:

INSERT INTO table\_name (column1, column2, column3, ...)  
VALUES (value1, value2, value3, ...);

The delete Statement:

The DELETE statement is used to delete existing records in a table.

DELETE Syntax:

DELETE FROM table\_name  
WHERE condition;

The update statement:

UPDATE table

SET column1 = expression1,

column2 = expression2,

...

[WHERE conditions];

1. Given the following two tables

Dept

|  |  |  |  |
| --- | --- | --- | --- |
| Column Name | Type | Key | Required |
| Dept\_Code | Number(2) | Primary key |  |
| Dept\_name | Varchar2 (14) | Not null |  |
| Dept\_Location | Varchar2 (30) |  |  |
| Manager\_ID | Number(10) |  |  |
| Dept\_Budget | Number(14,2) |  |  |

Emp

|  |  |  |
| --- | --- | --- |
| **Column Name** | **Type** | **Key** |
| Emp\_Id | Number(10) | Primary key |
| First\_Name | Varchar2 (20) | Not null |
| Last\_Name | Varchar2 (20) | Not Null |
| Email | Varchar2 (40) |  |
| Phone\_Number | Varchar2 (20) |  |
| Hire\_Date | Date |  |
| Salary | Number(14,2) |  |
| Dept\_Code | Number (2) | Foreign key that references Dept\_Code of the dept table |
| Gender | Char(1) |  |

1. Write an SQL statement to create the above two tables.

ANS:

Create Table Dept (Dept\_Code Number(2) Primary key,

Dept\_name Varchar2 (14) Not null,

Dept\_Location Varchar2 (30) , Manager\_ID Number(10), Dept\_Budget Number(14,2));

Create Table Emp (Emp\_Id Number(10) Primary key,

First\_Name Varchar2 (20) Not null, Last\_Name VARCHAR2 (20) Not null,

Email Varchar2 (40) , Phone\_Number Varchar2(20), Hire\_Date Date,

Salary Number(14,2) , Dept\_Code Number (2), Gender Char(1),

Foreign key (Dept\_Code) references Dept(Dept\_code));

2. Write an SQL statement to insert the following data into the Dept table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Dept\_code | Dept\_Name | Dept\_Location | Manager\_ID | Dept\_Budget |
| 10 | Research | Ajman | 300 | 150000.5 |
| 20 | Administration | Dubai | 400 | 200000 |
| 30 | Headquarter | AbuDhabi | 200 | 700000 |

ANS:

Insert Into Dept (Dept\_code, Dept\_Name, Dept\_Location, Manager\_ID, DEPT\_BUDGET)

VALUES (10, 'Research', 'Ajman', 300, 150000.5);

Insert Into Dept (Dept\_code, Dept\_Name, Dept\_Location, Manager\_ID, DEPT\_BUDGET)

VALUES (20, ‘Administration’, ‘Dubai’, 400, 200000);

Insert Into Dept (Dept\_code, Dept\_Name, Dept\_Location, Manager\_ID, DEPT\_BUDGET)

VALUES (30, ‘Headquarter’, ‘AbuDhabi’, 200, 700000);

3. Write an SQL statement to insert the following data into the Emp table

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Emp\_Id | First\_Name | Last\_Name | Email | Phone\_Number | Hire\_Date | Salary | Dept\_code | Gender |
| 400 | Salim | Ali | a@yahoo.com | 05066 | 10-12-2000 | 20000 | 10 | M |
| 500 | Mahir | Subhi | b@hotmail | 05078866 | 01-01-2010 | 12000 | 30 | M |
| 700 | Fatema | Matar | c@ajman | 050666777 | 01-09-2003 | 60000 | 30 | F |

INSERT INTO EMP(Emp\_Id, First\_Name, Last\_Name, Email, Phone\_Number, Hire\_Date, Salary, Dept\_code, GENDER)

VALUES (400, 'Salim', 'Ali', 'a@yahoo.com', '05066', '10-DEC-2000', 20000, 10, 'M');

INSERT INTO EMP(Emp\_Id, First\_Name, Last\_Name, Email, Phone\_Number, Hire\_Date, Salary, Dept\_code, GENDER)

VALUES (500, ‘Mahir’, ‘Subhi’, ‘b@hotmail’, ‘05078866’, ‘01-JAN-2010’, 12000, 30, ‘M’);

INSERT INTO EMP(Emp\_Id, First\_Name, Last\_Name, Email, Phone\_Number, Hire\_Date, Salary, Dept\_code, GENDER) VALUES

(600, ‘Fatema’, ‘Matar’, ‘c@ajman’, ‘050666777’, ‘01-SEP-2003’, 60000, 30, ‘F’);

4. Write an SQL statement to delete from Emp table the row which has Emp\_id = 700

ANS:

DELETE FROM Emp WHERE Emp\_id = 700;

5. Write an SQL statement to increase the salary of all male employees by 10%

ANS:

Update Emp set salary = salary\*1.1

Where Gender = ‘M’;

6. Write an SQL statement to delete from Dept table the row which has dept\_code = 10. If there is error try to fix that error

ANS:

DELETE FROM Dept WHERE dept\_code = 10;

There will be referential integrity constraint violation