### **Assignment Questions:**

1. **Basic SQL Queries:**
   * Write a SQL query to retrieve all columns from a table named employees.

* **SELECT \* FROM employees;**
  + Write a SQL query to retrieve the emp\_id, emp\_name, and dept\_id from the employees table, where the location is 'Cairo'.
* **SELECT emp\_id, emp\_name,dept\_id FROM employees WHERE location = ‘Cairo’;**

1. **DISTINCT Keyword:**
   * Write a SQL query that displays distinct dept\_id values from the employees table.

* **SELECT DISTINCT dept\_id FROM employees;**

1. **Data Definition Language (DDL):**
   * Write a SQL query to create a table students with the following columns: ID (Primary Key), First\_Name (not null), Last\_Name (default 'Unknown'), Address (default 'N/A'), City (default 'N/A'), and Birth\_Date.

* **CREATE TABLE students (**

ID INT AUTO\_INCREMENT PRIMARY KEY,

First\_Name Varchar(30) NOT NULL,

Last\_Name Varchar(30) DEFAULT ‘UNKNOWN’,

Address Varchar(50) DEFAULT ‘N/A’,

City VarChar(20) DEFAULT ‘N/A’,

Birth\_date Date

**);**

* + Write a SQL query to drop the students table.

**DROP TABLE students;**

1. **Data Manipulation Language (DML):**
   * Write a SQL query to insert the following values into the students table: ('Ahmed', 'Ali', 'Downtown', 'Cairo', '1995-01-01').

* **INSERT INTO students (First\_Name, Last\_Name, Address, City, Birth\_Date) VALUES (**'Ahmed', 'Ali', 'Downtown', 'Cairo', '1995-01-01'.**);**
  + Write a SQL query to update the Address of the student with Last\_Name = 'Ahmed' to 'Garden City'.
* **UPDATE TABLE students SET Address = ‘Garden City’ WHERE Last\_Name = ‘Ahmed’;**

1. **Transaction Control:**
   * Write a SQL query to delete the rows from the students table where City is 'Cairo', and then rollback the transaction.

* **START TRANSACTION;**

**DELETE FROM students WHERE City = ‘Cairo’;**

**ROLLBACK;**