Assignment Questions:

# Basic SQL Queries:

* + Write a SQL query to retrieve all columns from a table named employees.

Solution: 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'.

Solution: SELECT emp\_id, emp\_name, dept\_id

FROM employees

WHERE location = 'Cairo';

# DISTINCT Keyword:

* + Write a SQL query that displays distinct dept\_id values from the employees

table.

Solution: SELECT DISTINCT dept\_id

FROM employees;

# 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.

Solution: CREATE TABLE students (

ID INT PRIMARY KEY,

First\_Name VARCHAR(50) NOT NULL,

Last\_Name VARCHAR(50) DEFAULT 'Unknown',

Address VARCHAR(100) DEFAULT 'N/A',

City VARCHAR(50) DEFAULT 'N/A',

Birth\_Date DATE

);

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

Solution: DROP TABLE students;

# Data Manipulation Language (DML):

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

Solution: 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'.

Solution: UPDATE students

SET Address = 'Garden City'

WHERE Last\_Name = 'Ahmed';

# Transaction Control:

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

Solution: BEGIN TRANSACTION;

DELETE FROM students

WHERE City = 'Cairo';

ROLLBACK;