

## 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';**

### 2. DISTINCT Keyword:

- Write a SQL query that displays distinct `dept_id` values from the `employees` table.  
→ **SELECT DISTINCT dept\_id FROM employees;**

### 3. 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;**

### 4. 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';**

### 5. 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;**