

Assignment Questions and Answers

1. Basic SQL Queries

Question 1:

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

Answer:

```
SELECT * FROM employees;
```

Question 2:

Write a SQL query to retrieve the emp_id, emp_name, and dept_id from the employees table, where the location is 'Cairo'.

Answer:

```
SELECT emp_id, emp_name, dept_id  
FROM employees  
WHERE location = 'Cairo';
```

2. DISTINCT Keyword

Question:

Write a SQL query that displays distinct dept_id values from the employees table.

Answer:

```
SELECT DISTINCT dept_id  
FROM employees;
```

3. Data Definition Language (DDL)

Question 1:

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'),
- Birth_Date.

Answer:

```
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  
);
```

Question 2:

Write a SQL query to drop the students table.

Answer:

```
DROP TABLE students;
```

4. Data Manipulation Language (DML)

Question 1:

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

Answer:

```
INSERT INTO students (First_Name, Last_Name, Address, City, Birth_Date)
VALUES ( 'Ahmed', 'Ali', 'Downtown', 'Cairo', '1995-01-01');
```

Question 2:

Write a SQL query to update the Address of the student with Last_Name = 'Ahmed' to 'Garden City'.

Answer:

```
UPDATE students
SET Address = 'Garden City'
WHERE Last_Name = 'Ahmed';
```

5. Transaction Control

Question:

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

Answer:

```
BEGIN TRANSACTION;
```

```
DELETE FROM students
WHERE City = 'Cairo';
```

```
ROLLBACK;
```