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**Mohammed Abu-Hadhoud**
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لا تنسى الاشتراك في قناتنا على اليوتيوب ومشاركة القناة مع اصدقائك
لتعم الفائدة للجميع وانقاذ الاف الناس من التشتت وجزاكم الله خيرا
لا تنسونا من دعائكم وادعو لوالدي بالرحمة
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# مهم جداً

هذا الملف للمراجعة السريعة واخذ الملاحظات عليه فقط، لانه يحتوي على اقل من 20٪ مما يتم شرحه في الفيديوهات

الاستعجال والاعتماد عليه فقط سوف يجعلك تخسر كميه معلومات وخبرات كثيره

يجب عليك مشاهدة فيديو الدرس كاملا

لاتنسى عمل لايك ومشاركة القناة لتعم الفائدة للجميع

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Database Level 1
SQL (Concepts & Practice)

Dealing With Data
What is SQL?

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# Employees File:

| ID | FirstName | LastName | Gender | Birthdate | Salary | DepID | DeptName | DeptLocation |
|----|-----------|----------|--------|-----------|--------|-------|----------|--------------|
| 1 | Mohammed | Abu-Hadhoud | M | 6/11/1977 | 5000 | 1 | IT | Amman |
| 2 | Ali | Zaher | M | 5/7/1990 | 3000 | 2 | Finance | Amman |
| 3 | Lubna | Aqel | F | 5/5/2000 | 500 | 1 | IT | Amman |
| 5 | Fadi | Khalil | M | 6/6/1980 | 1400 | 4 | Marketing | Qatar |
| 6 | Maha | Majed | M | 7/7/2001 | 300 | 3 | HR | UAE |
| 7 | Omar | Ali | M | 6/6/1977 | 2000 | 1 | IT | Amman |
| 8 | Huda | Omar | F | 4/2/1990 | 1000 | 1 | IT | Amman |

**To Get
All Female
Employees**

- **You have to write code and loops.**
- **Slow process**
- **Slow performance**

**Primary Key**

Employees Table

| ID 🔑 | FirstName | LastName | Gender | Birthdate | Salary | DepartmentID |
|------|-----------|----------|--------|-----------|--------|--------------|
| 1 | Mohammed | Abu-Hadhoud | M | 6/11/1977 | 5000 | 1 |
| 2 | Ali | Zaher | M | 5/7/1990 | 3000 | 2 |
| 3 | Lubna | Aqel | F | 5/5/2000 | 500 | 1 |
| 5 | Fadi | Khalil | M | 6/6/1980 | 1400 | 4 |
| 6 | Maha | Majed | M | 7/7/2001 | 300 | 3 |
| 7 | Omar | Ali | M | 6/6/1977 | 2000 | 1 |
| 8 | Huda | Omar | F | 4/2/1990 | 1000 | 1 |

**Foreign Key**

**Primary Key**

Departments Table

| ID 🔑 | Name | Location |
|------|------|----------|
| 1 | IT | Amman |
| 2 | Finance | Amman |
| 3 | HR | UAE |
| 4 | Marketing | Qatar |

- **You Use SQL Query** ☺
- **Simple and fast.**

**Select * from Employees
Where Gender = 'F'**

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# What is SQL

- SQL stands for Structured Query Language
- Pronounced as "S-Q-L" or sometimes as "See-Quel".
- SQL is used to <u>communicate with a database</u>.
- SQL lets you <u>access and manipulate databases</u>
- Database management systems that use SQL are: Oracle, Sybase, Microsoft SQL Server, Access, Ingres, etc.

# What Can You Do With SQL?

- SQL can execute queries against a database
- SQL can retrieve data from a database
- SQL can insert records in a database
- SQL can update records in a database
- SQL can delete records from a database
- SQL can create new databases
- SQL can create new tables in a database
- SQL can create stored procedures in a database
- SQL can create views in a database
- SQL can set permissions on tables, procedures, and views

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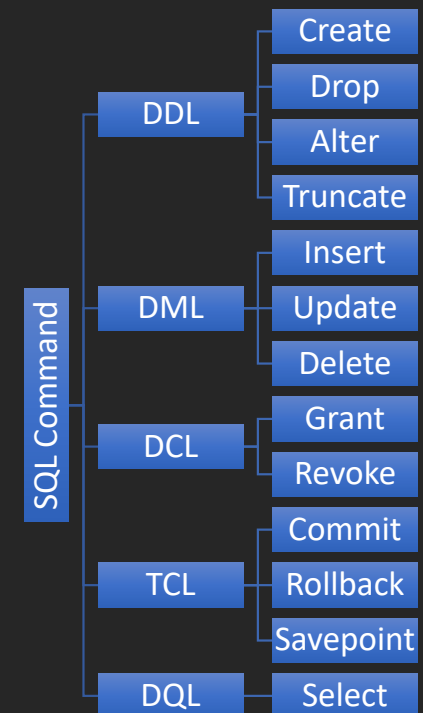26+ years of experience

# Examples Of SQL Statements:

- SELECT * FROM Employees WHERE Salary < 1000;

- SELECT FirstName , LastName FROM Employees WHERE Salary < 1000 and Gender='M';

- SELECT * FROM Employees WHERE Salary between 500 and 1000;

- Select Count(*) from Employees;

- Select Sum(Salary) from Employees;

- Select Avg(Salary) from Employees;

- Delete from Employees where ID=10;

- Update Employees set FirstName = 'Amjad' where ID = 10;

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# Examples:

- CREATE DATABASE MyDatabase;

- DROP DATABASE MyDatabase;

- CREATE TABLE Employees (
    ID int,
    FirstName varchar(255),
    LastName varchar(255),
    Address varchar(255),
    City varchar(255)
    );

# Types of SQL Statements:

- Data Definition Language (DDL)
- Data Manipulation Language (DML)
- Data Control Language (DCL)
- Transaction Control Language (TCL)
- Data Query Language (DQL)

| SQL Command | | |
|---|---|---|
| DDL | Create | |
| | Drop | |
| | Alter | |
| | Truncate | |
| DML | Insert | |
| | Update | |
| | Delete | |
| DCL | Grant | |
| | Revoke | |
| TCL | Commit | |
| | Rollback | |
| | Savepoint | |
| DQL | Select | |

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Thank You

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