



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 لا تنسونا من دعائكم

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What is Database?

A database is an organized collection of data so that it can be easily accessed. To manage these databases, Database Management Systems (DBMS) are used.

Types of DBMS:

In general, there are two common types of databases:

- Non-Relational (DBMS): File System, XML..etc.
- Relational (RDBMS): enhanced version of DBMS but with relations, examples SQLServer, Oracle, MySQL ..etc.



Employees File

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



In RDBMS.

Data that is stored in an organized fashion in tables containing rows and columns along with relations between these tables.

Primary Key

Column/Field/Attribute

Employees Table

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

Row/Entity/Record

Departments Table

Primary Key

ID 📍	Name	Location
1	IT	Amman
2	Finance	Amman
3	HR	UAE
4	Marketing	Qatar

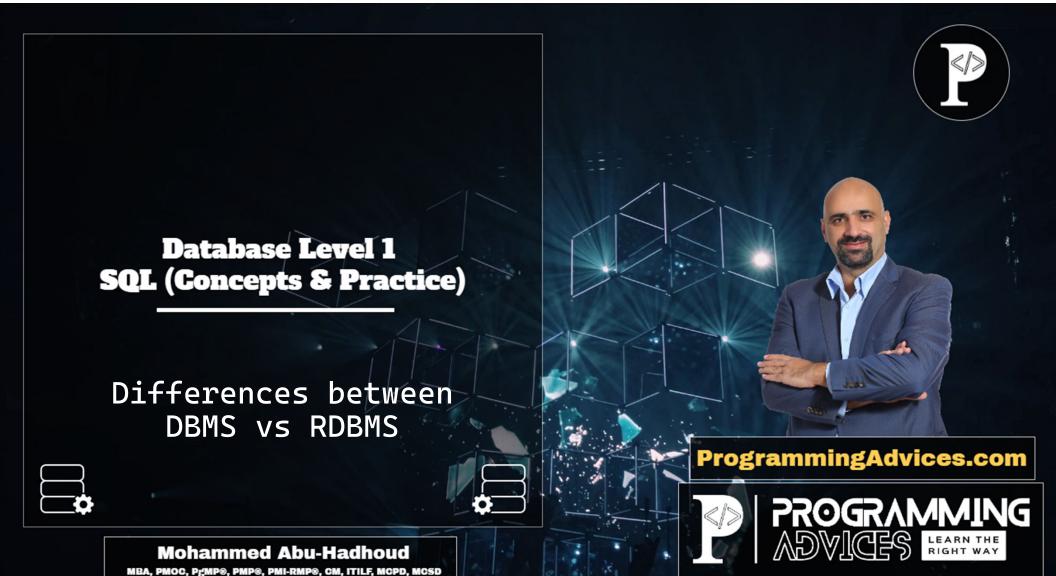
Foreign Key



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MBA, PMOC, PgMP0, PMP0, PMI-RMP0, CM, ITILF, MCPD, MCSD

26+ years of experience









Database Management System

Relational Database Management System

Example: Normal File System, XML..etc

Data Stored In Files no relations, Uses diffrent datastructures.

DBMS may or may not have a built-in query language

One user can access data at a time.

Diffrences

Example :MySQL, Oracle, MongoDB, SQL Server..etc.

Data stored In Tabular form (Tables and relations between them)

Uses a SQL to retrieve data from the database

Multi-users can access data.









Small Data, Less Scalable, Backup is hard

Larg Data, More Scalable, easy backup

less secured

No mormalization: No data integrity Or concestancy, more redundancy

Normalization: strong data integrity ,consistency, less redundancy

Limited Data Sharing

Centralized Data Sharing

Hard to deal with

Very Easy to deal with



Diffrences

More Secured

