INTRODUCTION TO DATABASES CHECKPOINT

MY SQL

What is MySQL ?

MySQL is an open-source relational database management system (RDBMS),

It uses tables as the main component and offers less functionality than PostgreSQL.

Features of MySQL :

- ✓ Security and authentification
- ✓ Client server execution and remote database access
- ✓ Embedded SQL
- ✓ Transaction Control Language

PostgreSQL

What is PostgreSQL ?

- An advanced, entrepise-class and open-source relational database system
- A highly stable database
- Used as a primary database for many web applications
- General purpose transaction database
- Language support : Python, Java, JavaScript(Node.Js) …

Features of PostgreSQL :

- ✓ Can run dynamic websites and web apps as a LAMP stack option
- ✓ Freely available unser an open source license
- ✓ Asynchronous replication
- ✓ Table inheritance
- ✓ Sophisticated locking mechanism

Microsoft SQL Server

What is SQL Server ?

- A relational Database Management System (RDBM)
- Developed and operated by Microsoft
- It manages and performs all the database operations
- It has both command-line and GUI (Graphical Use Interface)

Features of SQL Server :

- ✓ High availability management
- ✓ Support for geographic data
- ✓ Centralized management and deployment of multiple instances and applications from a single point of control
- ✓ Programmability…

MySQL vs Postgre SQL vs Microsoft SQL Server

MySQL

- A relational database management system.
- Most popular open source database.
- Not extensible.

Postgre SQL

- Available as free and open source software in perpetuity
- An object-relational database management system
- More advanced and highly extensible
- Provides online backup
- Most advanced open source database
- Postgre SQL does not have a native data type for geographic data

Microsoft SQL Server

- Available through commercial license and can be licensed on a per-core model or server and client acess level (CAL) model
- Use a variant of Structured Query Languafe (SQL) called T-SQL (for Transact-SQL)
- Microsoft SQL Server has the geography data type for storing geographic spatial data
- Easy to use and reliable, with strong .NET compatibility