

Microsoft SQL Server

- Microsoft SQL Server is a relational database management system (RDBMS) that supports a wide variety of transaction processing, business intelligence and analytics applications in corporate IT environments.
- Like other RDBMS software, Microsoft SQL Server is built on top of SQL, a standardized programming language that database administrators (DBAs) and other IT professionals use to manage databases and query the data they contain. SQL Server is tied to Transact-SQL (T-SQL), an implementation of SQL from Microsoft that adds a set of proprietary programming extensions to the standard language.

PostgreSQL

- PostgreSQL is a *relational database management system* (RDBMS). That means it is a system for managing data stored in *relations*. Relation is essentially a mathematical term for *table*. The notion of storing data in tables is so commonplace today that it might seem inherently obvious, but there are a number of other ways of organizing databases. Files and directories on Unix-like operating systems form an example of a hierarchical database. A more modern development is the object-oriented database.

MySQL

- MySQL is a relational database management system
- MySQL is open-source
- MySQL is free
- MySQL is ideal for both small and large applications
- MySQL is very fast, reliable, scalable, and easy to use
- MySQL is cross-platform
- MySQL is compliant with the ANSI SQL standard
- MySQL was first released in 1995
- MySQL is developed, distributed, and supported by Oracle Corporation

SQL Server vs MySQL vs Postgresql

- **MySQL** is the most popular amongst the relational databases and is a widely used one too. Offers a fully-managed database service for Google Cloud platform and is a scalable database with high availability and security at no extra cost. **PostgreSQL** is a fully managed and scalable relational database with high availability and security built in at no additional charge. It is a fully managed database service for the Google Cloud Platform. Is better in query optimization and query execution as compared to MySQL. Postgres has a storage engine which is suitable for INSERT and complex search applications such as data mining. **Microsoft SQL Server** developed by Microsoft has multiple editions with different feature sets and user profiles. It has some fantastic features like SQL server on Linux, resumable online index build, machine learning services, query processing improvements, and much more.