What is SQL Server?

Microsoft SQL Server is a relational database management system. It supports the Structured Query language and comes with its own implementation of the SQL language which is the Transact-SQL(T-SQL). It has an integrated environment to handle SQL databases, which is the SQL Server Management Studio.

Instance of SQL Server :

- An instance is an installation of SQL Server.

- An instance is an exact copy of the same software.

- If we install 'n' times, then 'n' instances will be created.

- There are two types of instances in SQL Server a) Default b) Named.

- Only one default instance will be supported in one Server.

- Multiple named instances will be supported in one Server.

- Default instance will take the server name as Instance name.

- Default instance service name is MSSQLSERVER.

Advantages of Instances:

- To install different versions in one machine.

- To reduce cost.

- To maintain production, development, and test environments separately.

- To reduce temporary database problems.

- To separate security privileges.

- To maintain standby server.

What is MySQL?

MySQL is a relational database management system based on the Structured Query Language, which is the popular language for accessing and managing the records in the database. MySQL is open-source and free software. It is supported by Oracle Company.

Mysql is used by Wikipedia, Facebook, Google, Flickr, YouTube, and all famous companies.

The WordPress, Joomla, Drupal and all Content Management Systems (CMS) uses the MySQL.

What is PostgreSQL?

PostgreSQL is an open-source relational database system with 30+ years of active development in the industry. PostgreSQL supports both SQL (relational) and JSON (non-relational) querying.

PostgreSQL and MySQL are both immensely popular open-source databases, and a variety of real-time applications today utilize both. MySQL is known to be the world's most popular database, whereas PostgreSQL is known as the world's most advanced RDBMS database. As an RDBMS database, MySQL is not fully SQL compliant and does not have many of the features that PostgreSQL has. This is why PostgreSQL has become a great choice for developers, and its popularity is growing exponentially with each passing day.

Microsoft SQL Server vs. MySQL vs. PostgreSQL

Name	Microsoft SQL Server	Mysql	PostgreSQL
License	Commercial	Open source	Open source
Server operating systems	Linux / Windows	FreeBSD Linux OS X Solaris Windows	FreeBSD HP-UX Linux NetBSD OpenBSD OS X Solaris Unix Windows
Supported programming languages	C# C++ Delphi Go Java JavaScript (Node.js) PHP Python R Ruby Visual Basic	Ada C C# C++ D Delphi Eiffel Erlang Haskell Java JavaScript (Node.js) Objective-C OCaml Perl PHP Python Ruby Scheme Tcl	.Net C C++ Delphi Java JavaScript (Node.js) Perl PHP Python Tcl