1. **What is RDBMS?**

RDBMS stands for Relational Database Management System. In fact,RDBMS is a program used to maintain a relational database.

RDBMS is the basis for all modern database systems such as MySQL, Microsoft SQL Server, Oracle, and Microsoft Access.RDBMS uses [SQL queries](https://www.w3schools.com/sql/default.asp) to access the data in the database.

## What is a Relational Database?

A **relational database** is a set of tables (datasets with rows and columns) that contain information relating to other tables in the database.

1. **SQL**

**SQL**, or Structured Query Language, is the standard language for interacting with relational databases. With SQL, you can query, or ask questions of, the data in a relational database. Working with SQL and relational databases is an invaluable skill set for a data analyst, data engineer, or a data scientist.

1. **MySQL**

**MySQL** has consistently been **the most popular version** of SQL in Stack Overflow questions. Second in line is **Microsoft SQL Server** (including T-SQL, the name of Microsoft’s dialect of SQL), which remains a consistently more popular tag than **PostgreSQL** and **SQLite**.

Third,it’s a definite leader among SQL solutions, used by Google, LinkedIn, Amazon, Netflix, Twitter, and others. [MySQL](https://www.mysql.com/" \t "_blank) popularity has been growing a lot because teams increasingly prefer open-source solutions instead of commercial ones.

**Price**: the database solution is developed by Oracle and has additional paid tools; the core functionality can be accessed for free.

**Language**: MySQL is written in C++; database management is done with Structured Query Language.

1. **SQL Server**

Unlike Postgresql vs MySQL, SQL Server is a commercial solution. It’s preferred by companies who are dealing with large traffic workloads on a regular basis. It’s also considered to be one of the most compatible systems with Windows services.

The SQL Server infrastructure includes a lot of additional tools, like reporting services, integration systems, and analytics. For companies that manage multiple teams, these tools make a big difference in day-to-day work.

**Price**: the database has a [free edition](https://www.microsoft.com/en-us/sql-server/sql-server-downloads) for developers and small businesses but only supports 1 processor, 1GB of maximum memory used by the database engine and 10GB maximum database size.

**Price**: open-source

**Language**: C

. For a server, users need to pay $931.

## PostgreSQL

A tried-and-proven [relational database](https://www.postgresql.org/) that is known for supporting a lot of data types, intuitive storage of schemaless data, and rich functionality. Some developers go even as far as to claim that it’s the most advanced open-source database on the market. We wouldn’t go that far, but it’s definitely a highly universal solution.

### What’s the difference?

PostgreSQL, MySQL, and SQLite use very similar syntax, with some notable differences highlighted below. Microsoft SQL Server has the greatest contrast in SQL syntax, as well as a wide variety of functions not available in other platforms.

For students who have little to no experience with SQL and are looking to gain the most broadly applicable skills, I recommend starting with PostgreSQL. Despite the overwhelming popularity of MySQL, PostgreSQL may be a better choice because its syntax most closely conforms to [Standard SQL](https://www.postgresql.org/about/). This means that you can easily translate your skills to other database management systems such as MySQL or SQLite.

### MySQL vs PostgreSQL

After reading a lot about the difference between MySQL vs PostgreSQL, check out this quick summary as well.

* MySQL is a pure RDBMS whereas PostgresSQL is an object-relational DBMS.
* Both these support Solaris, Windows OS, Linux, OS X. Additionally, MySQL runs on FreeBSD and PostgreSQL on HPUX.
* MySQL is from Oracle while PostgreSQL PostgreSQL runs by a group of many companies a.k.a. PGDG.
* My SQL is not extensible, whereas PostgreSQL has it.
* PhpMyAdmin enables GUI and SQL interface for MySQL. Wherein, the pgAdmin tool does the same for PostgreSQL.
* MySQL has builtin tools for offline database backup, whereas PostgresSQL takes full backup online.
* PostgreSQL has built-in SSL support, but it doesn’t come in MySQL by default.

### MySQL vs PostgreSQL – Which should you choose?

There are many factors which we’ve already discussed above. And they should help make you a decision between choosing MySQL vs PostgreSQL.

However, there is another way of looking at it. Say, if you already have a project using PostgreSQL, then you can easily migrate to Oracle. Both Oracle and PostgreSQL share almost similar syntax. Hence, porting from one to other is an easy job.

On the other hand, MySQL isn’t 100% SQL standard so won’t be that easier migrating it. PostgreSQL comes with ACID compliance, which means it will provide data integrity, and ensure no loss of data.

However, MySQL is a better option if you want speed, plenty of plugins, and tools to optimize MySQL.

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