Introduction of MySQL

* What is MySQL?
* MySQL was created by Michael Monty in 1995.
* MySQL is a free and open source, relational database management system based on structured query language.
* MySQL is available on all major operating systems, including windows, Linux and Solaris.
* It is very fast, reliable, scalable and easy to use.
* It is ideal for both small and large applications.
* MySQL is named after co-founder Michael “Monty” Widenius’s daughter: My.
* A row is horizontal and represents individual records. Whereas a column is vertical and holds data about a specific attribute.
* What is SQL?
* SQL was developed at IBM by Donald D. Chamberlin and Raymond F. Boyce.
* SQL stands for structured query language.
* It is used for storing and managing data in relational database management system.
* It enables a user to create, read, update and delete relational databases and tables.
* Difference between SQL and MySQL?

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| SQL | MySQL |
| SQL is a language to manage databases. | MySQL is a database software. |
| It is used to query databases. | MySQL stores the data. |
| SQL does not provide connectors. | MySQL provide an integrated tool called MySQL Workbench |
| SQL codes or commands are used in oracle, SQL server, Postgresql and MySQL. | It is uses SQL for data management. |
| To query and operate database system. | Allows data handling, storing, modifying, deleting in a tabular format. |
| It is less flexible. | It is flexible and scalable. |

* What is DBMS?
* Database management system is a software system that is designed to manage and organize data in a structured manner.
* It allows user to create, modify, and query a database.
* It provides protection and security to the database.
* In the case of multiple users, it also maintains data consistency.
* DBMS provide an environment to store and retrieve data in convenient and efficient manner.
* For example: MySQL AND ORACLE.
* What is RDBMS?
* It stands for relational database management system.
* It is used to create, update, and manage relational databases.
* It is stored data in the form of tables.
* For example: MySQL, PostgreSQL, MariaDB.
* Difference between DBMS and RDBMS?

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| DBMS | RDBMS |
| In DBMS data is stored in the file format. | In RDBMS data is stored in table format. |
| Individual data element access. | Multiple data elements are available at the same time. |
| There is some normalization. | Normalization is not possible. |
| High data redundancy. | Low data redundancy. |
| No keys and indexes. | Has keys and indexes. |
| Difficult to modify data. | Easier to modify data. |