**SQL General Questions**

1. SQL: Structured Query Language

It is a programming language specifically designed for working with [databases](https://365datascience.com/sql-why-databases/).

1. Database? DBMS?

**Database**: A database, implying an electronic database, is data stored on a computer and organized in a way that makes it [easy to access and manipulate](https://365datascience.com/operators-in-sql/).

**DBMS**: The software tool that allows the user to interact with the data stored in the database is called a **database management system** – DBMS.

1. Types of joins

**Inner Join**: It is used to return all the rows from multiple tables where the join condition is satisfied.

**Left Join**: it is used to return all the rows from the left table, but only the matching rows from the right table where the join condition is fulfilled.

**Right Join**: it is used to return all the rows from the right table, but only the matching rows from the left table where the join condition is fulfilled.

**Full Join**: it returns all the rows from the left-hand side table and all the rows from the right-hand side table.

1. Primary Key? Foreign Key?

**Primary Key**: unique identifier in a table, two rows can’t have the same Primary Key and it cannot be NULL.

**Foreign Key**: a column (or columns) that references a column (most often the Primary Key) of another table. (can contains NULL value).

1. Differences between **WHERE** and **HAVING**?

* WHERE is used to filter rows before GROUP BY and HAVING is used to select rows after GROUP BY.
* WHERE clause cannot contain aggregate functions, such as COUNT(), SUM(), MAX(), MIN(), but HAVING clause can.
* WHERE can be used without GROUP BY. HAVING cannot be used without GROUP BY.

6. Differences between **UNION** and **UNION ALL**?

* UNION ALL keeps all of the records from each of the original data sets. UNION removes any duplicate records.