SQL/PLSQL:

BASIC CONCEPTS:

SQL is a programming language for Relational Databases. It is designed over relational algebra and tuple relational calculus. SQL comes as a package with all major distributions of RDBMS.
SQL comprises both data definition and data manipulation languages. Using the data definition properties of SQL, one can design and modify database schema, whereas data manipulation properties allows SQL to store and retrieve data from database.

SQL stands for Structured Query Language. It is used for storing and managing data in relational database management system (RDMS).

➢ It is a standard language for Relational Database System. It enables a user to create, read, update and delete relational databases and tables.

➢ All the RDBMS like MySQL, Informix, Oracle, MS Access and SQL Server use SQL as their standard database language.

➢ SQL allows users to query the database in a number of ways, using English-like statements.
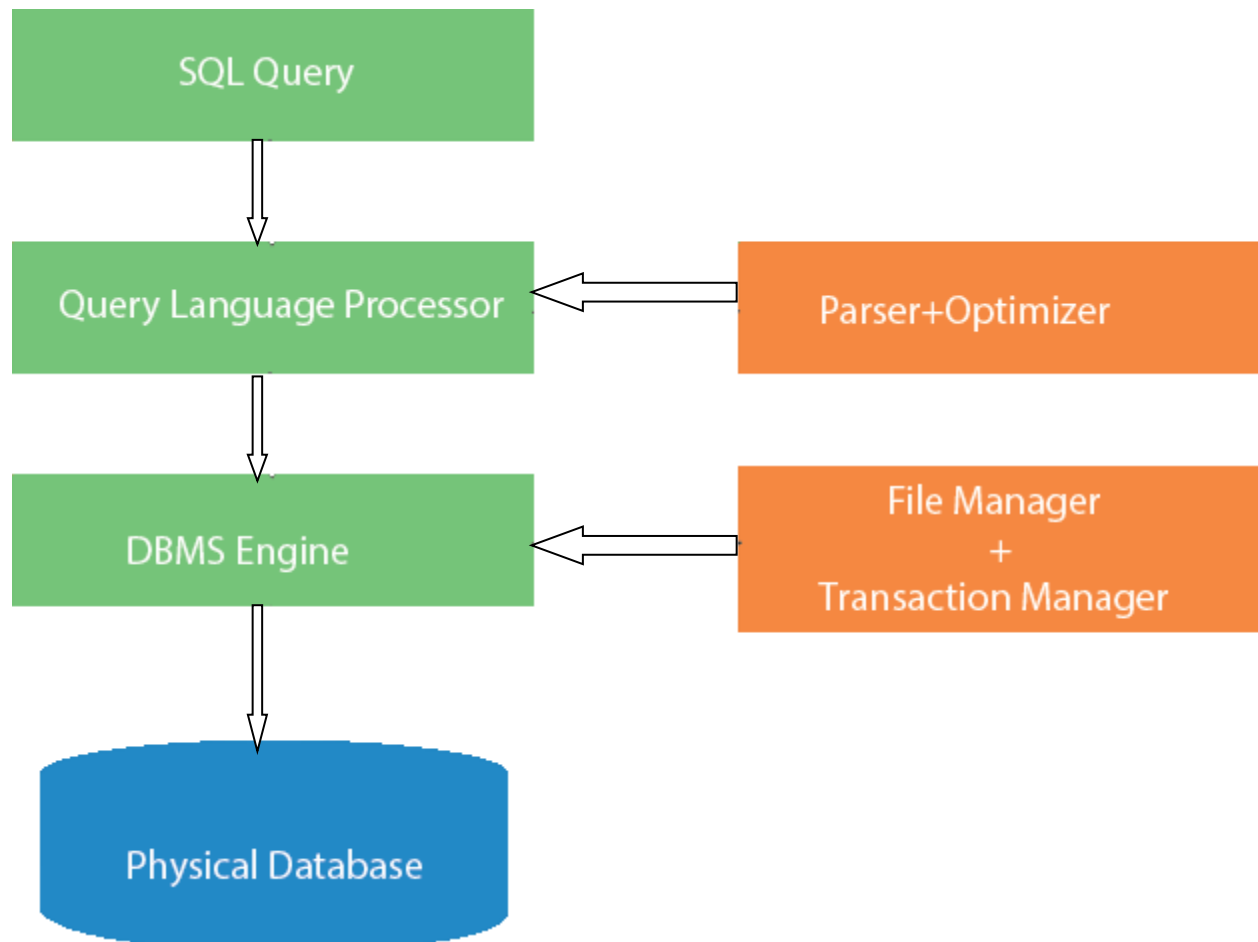
Rules:

SQL follows the following rules:
➢ Structure query language is not case sensitive. Generally, keywords of SQL are written in uppercase.

➢ Statements of SQL are dependent on text lines. We can use a single SQL statement on one or multiple text line.

➢ Using the SQL statements, you can perform most of the actions in a database.

SQL depends on tuple relational calculus and relational algebra.

SQL process:

When an SQL command is executing for any RDBMS, then the system figure out the best way to carry out the request and the SQL engine determines that how to interpret the task.

➢   In the process, various components are included. These components can be optimization Engine, Query engine, Query dispatcher, classic, etc.

➢   All the non-SQL queries are handled by the classic query engine, but SQL query engine won't handle logical files

Characteristics of SQL

SQL is easy to learn

SQL is used to access data from relational database management systems

SQL can execute queries against the database.

SQL is used to describe the data.

SQL is used to define the data in the database and manipulate it when needed

SQL is used to create and drop the database and table

SQL is used to create a view, stored procedure, function in a database.

SQL allows users to set permissions on tables, procedures, and views.