SQL Query list

**What is SQL?**

SQL is Structured Query Language, which is a computer language for storing, manipulating and retrieving data stored in relational database. SQL is the standard language for Relation Database System. All relational database management systems like MySQL, MS Access, Oracle, Sybase, Informix, postgres and SQL Server use SQL as standard database language.

**SQL Commands:**

The standard SQL commands to interact with relational databases are CREATE, SELECT, INSERT, UPDATE, DELETE and DROP. These commands can be classified into groups based on their nature.

1. **DDL-Data Definition Language**

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| **Command** | **Description** |
| CREATE | Creates a new table, a view of a table, or other object in database |
| ALTER | Modifies an existing database object, such as a table. |
| DROP | Deletes an entire table, a view of a table or other object in the database. |

1. **DML-Data Manipulation Language:**

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| --- | --- |
| **Command** | **Description** |
| INSERT | Creates a record |
| UPDATE | Modifies records |
| DELETE | Deletes records |

1. **DCL -Data Control Language:**

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| --- | --- |
| **Command** | **Description** |
| GRANT | Gives a privilege to user |
| REVOKE | Takes back privileges granted from user |

1. **DQL -Data Query Language:**

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| **Command** | **Description** |
| SELECT | Retrieves certain records from one or more tables |

**SQL SELECT Statement**

* **SELECT Database, USE Statement**
  + When you have multiple databases in your SQL Schema, then before starting your operation, you would need to select a database where all the operations would be performed.
  + The SQL USE statement is used to select any existing database in the SQL schema.
  + The basic syntax of the USE statement is as shown below –

USE DatabaseName;

* **SQL SELECT Statement:**

1. SELECT *column1, column2....columnN* FROM table\_name;
2. **SQL DISTINCT Clause:**

SELECT DISTINCT *column1, column2....columnN* FROM table\_name;

1. **SQL WHERE Clause:**

SELECT *column1, column2....columnN* FROM table\_name

WHERE CONDITION;

1. **SQL AND/OR Clause:**

SELECT *column1, column2....columnN* FROM table\_name

WHERE CONDITION-1 {AND|OR} CONDITION-2;

1. **SQL BETWEEN Clause:**

SELECT *column1, column2....columnN* FROM table\_name

WHERE *column\_name* BETWEEN val-1 AND val-2;

1. **SQL ORDER BY Clause:**

SELECT *column1, column2....columnN* FROM table\_name

WHERE CONDITION ORDER BY column\_name {ASC|DESC};

1. **SQL LIKE Clause:**

SELECT column1, column2....columnN FROM table\_name

WHERE column\_name LIKE { PATTERN };

1. **SQL GROUP BY Clause:**

SELECT SUM(column\_name) FROM table\_name WHERE CONDITION GROUP BY column\_name;

1. **SQL COUNT Clause:**

SELECT COUNT(column\_name) FROM table\_name WHERE CONDITION;

1. **SQL HAVING Clause:**

SELECT SUM(column\_name) FROM table\_name WHERE CONDITION

GROUP BY column\_name HAVING (arithematic function condition);