

SQL Quick Reference

Terminologies

Term	Meaning
SQL	Structured Query Language – used to communicate with database
Data	Known facts which is recorded with implicit meaning
Database	Collection of logically related data at one place.
Database management system	A record keeping system that is managed by computer
Relational Database management system	Database management system (DBMS) based on the relational model as invented by E. F. Codd
Relation	Table
Tuple	Row in a table
Attribute/Field	Column in a table
Degree	Number of attributes
Cardinality	Number of tuples
Primary Key	Unique identifier of the table

Commands

Data Definition Language (DDL)	Create	Create objects in the database
	Alter	Alters the structure of the database
	Drop	Delete objects from the database
	Truncate	Remove all records from a table, including all spaces allocated for the records are removed
Data Manipulation Language (DML)	Select	Retrieve data from the a database
	Insert	Insert data into a table
	Update	Updates existing data within a table
	Delete	Deletes all records from a table, the space for the records remain
Data Control Language (DCL)	Grant	Gives users access privileges to database
	Revoke	Withdraw access privileges given with the GRANT command
Transaction Control (TCL)	Commit	Save work done
	Savepoint	Identify a point in a transaction to which you can later roll back
	Rollback	Restore database to original since the last COMMIT

Clauses

Where	Specify a condition while fetching the data from one or more tables
Like	Compare a value to similar values using wildcard operators (match character pattern)
Between..And	Compare data for a range of values (inclusive)
In	Compare a column with more than one value
Top	Fetch a TOP N number or X percent records from a table
Order By	Sort the data in ascending or descending order based on one or more columns
Group By	Used in collaboration with the SELECT statement to arrange identical data into groups
Having	Filter data based on the group functions

Operators/other functions

Operator	Meaning
AND	Returns TRUE if both component conditions are true
OR	Returns TRUE if either component conditions are true
NOT	Returns TRUE if condition is false
Upper	Converts the value of the field to uppercase
Lower	Converts the value of the field to lowercase
Distinct	Extracts distinct values of the column(s)
Average	Returns average of records
Count	Returns count of records
Max	Returns max record value of specified column
Min	Returns min record value of specified column
Sum	Returns sum of the record value of specified column
Union	Combine the result-set of two or more SELECT statements
Union All	Same as Union, except that allows all duplicate values in the output set
Intersect	Returns only the common rows in both tables
Minus	Returns unique rows that are returned by the first query but are NOT returned by the second query