



@swapnakpanda

SQL CHEATSHEET

- ✓ Genuine
- ✓ Authentic
- ✓ Quality

Categories

DDL : Data Definition Language
DQL : Data Query Language
DML : Data Manipulation Language
DCL : Data Control Language
TCL : Transaction Control Language

Commands

DDL
CREATE | DROP | ALTER | TRUNCATE
RENAME | COMMENT

DQL
SELECT

DML
INSERT | UPDATE | DELETE | LOCK
CALL | EXPLAIN PLAN

DCL
GRANT | REVOKE

TCL
COMMIT | ROLLBACK
SAVEPOINT | SET TRANSACTION

Operators

Arithmetic
+ - * / %

Bitwise
& | ^

Comparison
= < > <= >= != <> !=

Compound
+= -= *= /= %=&= |= ^=

Logical
AND | OR | NOT | ANY
SOME | ALL | BETWEEN
IN | EXISTS | LIKE
IS NULL | UNIQUE

Important Keywords

WHERE | DISTINCT | LIMIT
ORDER BY | DESC | ASC
AS | FROM | SET | VALUES
CASE | DEFAULT

Database Objects

TABLE | VIEW | SYNONYM
SEQUENCE | INDEX | TRIGGER

Constraints

NOT NULL | UNIQUE
PRIMARY KEY | FOREIGN KEY
CHECK | DEFAULT

Aggregation Functions

AVG | COUNT
MAX | MIN | SUM

Aggregation Keywords

GROUP BY | HAVING

Joins

INNER JOIN



LEFT [OUTER] JOIN



FULL [OUTER] JOIN



RIGHT [OUTER] JOIN



Set Operations

UNION
UNION ALL



INTERSECT



EXCEPT
MINUS



DDL Examples

Create a Table
CREATE TABLE Students (
rollno int PRIMARY KEY,
fname varchar(255) NOT NULL,
lname varchar(255)
);

Adding a new column to the Table
ALTER TABLE Students
ADD email varchar(255);

Modifying the data type of existing column
ALTER TABLE Students
ALTER COLUMN lname varchar(512);

Removing an existing column from the Table
ALTER TABLE Students
DROP COLUMN email;

Truncate (remove all data) a Table
TRUNCATE TABLE Students;

Drop a Table
DROP TABLE Students;

DQL Examples

Fetch all data from a Table
SELECT * FROM Students;

Filter data from a Table
SELECT * FROM Students
WHERE rollno=1234;

Fetch selected columns
SELECT fname, lname
FROM Students
WHERE rollno>1234
AND age < 15;

Fetch maximum 10 rows
SELECT fname, lname
FROM Students
WHERE rollno>1234
AND age < 15
LIMIT 10;

Fetch count of records
SELECT count(*)
FROM Students;

Fetch Maximum Age
SELECT max(age)
FROM Students;

Fetch Minimum Age
SELECT min(age)
FROM Students;

Fetch Sum of Age
SELECT sum(age)
FROM Students;

Fetch Average Age
SELECT avg(age)
FROM Students;

Fetch Average Age for each gender
SELECT avg(age)
FROM Students
GROUP BY gender;

Sort (order) fetched records
SELECT fname, lname
FROM Students
WHERE rollno>1234
AND age < 15
ORDER BY gender;

Sort in descending order
SELECT fname, lname
FROM Students
WHERE rollno>1234
AND age < 15
ORDER BY gender DESC;

Fetch from 2 Tables
SELECT fname, clsteacher
FROM Students
INNER JOIN Section
ON Students.section
=Section.id;

DML Examples

Insert data (rows) into a Table
INSERT INTO Students (rollno, fname, lname)
VALUES (1234, 'Christiano', 'Ronaldo');

Update data (value of column) of a Table
UPDATE Students SET lname = 'Messi'
WHERE rollno=1234;

Delete data (rows) from a Table
DELETE FROM Students WHERE rollno=1234;

Aggregate and, Filter
SELECT section, count(*) AS studentcount
FROM Students
GROUP BY section
HAVING count(*) > 20;

Full Outer Join
SELECT fname, clsteacher
FROM Students
FULL JOIN Section
ON Students.section =Section.id;

Take prior permission before using it for commercial purposes. Attribution is required for all non-commercial uses.