CODE YODHA

SQL Cheatsheet Essential Commands

Data Querying (SELECT)

- **Retrieve all records** - SELECT * FROM table_name;
- **Select specific columns** - SELECT column1, column2 FROM table_name;
- **Unique values** - SELECT DISTINCT column FROM table_name;
- Count rows - SELECT COUNT(*) FROM table_name;
- **Group and count** - SELECT column1, COUNT(*) FROM table_name GROUP BY column1;
- **Filter rows** - SELECT column1 FROM table_name WHERE column2 = 'value';
- **Range filter** - SELECT * FROM table_name WHERE column1 BETWEEN value1 AND value2;
- **Sort ascending** - SELECT * FROM table_name ORDER BY column1 ASC;
- **Sort descending** - SELECT * FROM table_name ORDER BY column1 DESC;

Data Manipulation (INSERT, UPDATE, DELETE)

- **Insert row** - INSERT INTO table_name (column1, column2) VALUES (value1, value2);
- **Update data** - UPDATE table_name SET column1 = value1 WHERE condition;
- **Delete records** - DELETE FROM table_name WHERE condition;

Data Definition (CREATE, ALTER, DROP)

- **Create table** - CREATE TABLE table_name (column1 datatype PRIMARY KEY, column2 datatype NOT NULL, column3 datatype DEFAULT default_value);
- **Add column** - ALTER TABLE table_name ADD column_name datatype;
- **Drop column** - ALTER TABLE table_name DROP COLUMN column_name;
- **Delete table** - DROP TABLE table_name;

Joins & Relationships

- **Inner join** - SELECT * FROM table1 INNER JOIN table2 ON table1.id = table2.fk_id;
- **Left join** - SELECT * FROM table1 LEFT OUTER JOIN table2 ON table1.id = table2.fk_id;
- **Right join** - SELECT * FROM table1 RIGHT OUTER JOIN table2 ON table1.id = table2.fk_id;
- **Full outer join** - SELECT * FROM table1 FULL OUTER JOIN table2 ON table1.id = table2.fk_id;

Subqueries & Set Operations

- **Subquery** - SELECT column FROM table WHERE column IN (SELECT column FROM table WHERE condition);
- **Union** - SELECT column FROM table1 UNION SELECT column FROM table2;
- **Intersect** - SELECT column FROM table1 INTERSECT SELECT column FROM table2;
- **Except** - SELECT column FROM table1 EXCEPT SELECT column FROM table2;

Indexes, Views & Transactions

- **Create index** - CREATE INDEX index_name ON table_name (column);
- **Create view** - CREATE VIEW view_name AS SELECT column1, column2 FROM table_name WHERE condition;
- **Inside transaction** - BEGIN TRANSACTION; – UPDATE table_name SET column = value WHERE condition;
- **Save changes** - COMMIT;
- **Revert changes** - ROLLBACK;

YodhaNote