SQL Basic Cheat Sheet

Employee Table

Consider the above table for all the examples given in the cheat

Emp_Name	Designation	Salary
Smith	Analyst	55000
Jason	Designer	75000
Andrea	Sales	35000

Data Types for SQL

Numeric	String	Date
Data	Data Da	ta
Types	Types	Types
Bigint,	Char,	Date,
Smallint,	Varchar,Te	Time,
int,	xt, nChar,	Year,
Tinyint,	nVarchar	Datetime
Decimal		Datetime
		offset

SQL Commands

Numeric Data Types

Drop table

Employee

Data Definition Language (DDL)	Data Manipulation Language (DML)	Data Query Language (DQL)	Data Control Language (DCL)
Create, Alter, Drop, Truncate	Update, Insert, Delete	Select	Grant, Revoke
Example:	Example:	Example:	Example:
Create table Employee (Emp_Name Varchar(25), Designation Char(25), Salary Int)	Update Employee SET Salary = 35000 where Salary = 25000	Select * from Employee	Grant Select, Insert, Delete ON mydb TO 'userl'@'localhos t';
Alter table Employee Alter column Designation Char(30)	Delete from Employee Where Salary < 10000	Select Designation from Table_name	Revoke Update ON Sales From ROLE_A;

Basic Query

Selecting All The Columns

Select * from Employee

Output:

Emp_Name	Designation	Salary
Smith	Analyst	55000
Jason	Designer	75000
Andrea	Sales	35000

Selecting Specific Column

Select Designation from Table_name

Output:

Designation
Analyst
Designer
Sales

Advance Filtering Query

With the help of comparison operator, we can perform advanced filtering in numeric or string values.

Comparison Operator

=, >, <, >=, <=, <>,LIKE, IN

Get the employees records whose salary is equal to 55000 or greater than 55000

Select * from Employee
Where Salary >= 55000

Output:

Emp_Name	Designation	Salary
Smith	Analyst	55000
Jason	Designer	75000

Get the employees records whose Designation contains 'A' in it.

Output:

Select * from Employee
Where Designation LIKE '%a%'

E	mp_Name	De	esignation	Salo	ary	
S	mith		Analyst		55000	
A	ndrea		Sales		35000	

Sorting Records

Sort the employees table in ascending order.

Select * from Employee
Order by Salary ASC

Output:

Emp_Name	Designation	Salary
Andrea	Sales	35000
Smith	Analyst	55000
Jason	Designer	75000

Sort the employees table in descending order.

Select * from Employee
Order by Salary DESC

Output:

Emp_Name	Designation	Salary
Jason	Designer	75000
Smith	Analyst	55000
Andrea	Sales	35000

Multiple Conditions

With the help of comparison operator, we can perform advanced filtering in numeric or string values.

Logical Operator

ALL, AND, ANY, BETWEEN, EXISTS, IN, LIKE, NOT, OR, SOME

Get the employees records whose Designation contains 'A' in it also salary is greater than 50000

Select * from Employee Where Designation LIKE '%a% AND Salary > 50000

Output:

Emp_Name	Designation	Salary
Smith	Analyst	55000

Get the employees records whose Designation contains 'A' in it or the salary is greater than 50000

Output:

Select * from Employee Where Designation LIKE '%a% OR Salary > 50000

Emp_Name	Designation	Salary
Smith	Analyst	55000
Jason	Designer	75000
Andrea	Sales	35000

Basic Filtering Query

Where: The where clause is used to filter the table horizontally

Get the employees records whose salary is 55000

Select * from Employee where Salary = 55000

Output:

Emp_Name	Designation	Salary
Smith	Analyst	55000