

☐ See CHEAT SHEET !

TABLE 2: PERFORMANCE EVALUATION - 2025

Emp ID	First Name	Last Name	Job Descr.	Org Sygn	Position	Last promo. Date	Work Serv. Age	Evaluation
1							15✓	30✓
2							9✓	20✓
3							20✓	60✓
4							10✓	80✓
5							7✓	95✓
6							18✓	55✓
7							20✓	40✓
8							14✓	69✓
9							10✓	80✓
							11	75✓

EXCELLENT = 95-100

VERY GOOD = 90-95

GOOD = 71-90

AVERAGE = 61-70

FAIR = 51-60

POOR = 0-50

Recommendation  
(5)

TABLE 3: PROTECTION

Emp ID	First Name	Last Name	Due promo	Last promo date	Eval Grade	Appr Val
int	Varchar (50)	Varchar (50)	YES		POOR	* Train N.
✓	✓	✓	NO *		POOR *	* Train N.
			NO		AVERAGE	FAIR
			YES		GOOD	on watch list
			YES		VERY GOOD	App.
①	②	③	NO (4)	⑤	FAIR	⑥
			YES		POOR	AVERAGE
			NO		GOOD	NAP
			YES			
			YES			
			YES			

APPROVED - VERY GOOD



Study Keys <sup>Types</sup> & How they relate!

Data Definition Language (DDL) CC TRAD  
create | drop | alter | truncate | rename | comment

Data Query Language (SQL)  
select

Data Manipulation Language (DML) IN-DUCE-LOGIC  
insert | update | delete | lock | call | Explain plan.

Data Control Language (DCL)  
Grant | Revoke

Transaction Control Language (TCL) SAVE-SCROLL  
Commit | Rollback | Savepoint | Set transaction.

### CREATE STATEMENT

[Creates a table only].

Create table -TABLENAME-

```
(  
COLUMN1 INT AUTO-INCREMENT PRIMARY KEY,  
COLUMN2 varchar (50),  
COLUMN3 varchar (250),  
COLUMN4 INT,  
);
```

COMMENT [Provides comment on a line]

/\* This is a comment line \*/

# Another type of comment line

TRUNCATE [Removes all data in the table]

truncate table -TABLENAME-

//COROLLARY: SHOW TABLES FROM -DATABASE-.



## RENAME STATEMENT [Renames tables]

✓ rename table - OLD\_TABLE\_NAME to - NEW\_TABLE\_NAME;  
OR alter table - OLD\_TABLE\_NAME to - NEW\_TABLE\_NAME;

## ALTER STATEMENT [Alters tables, columns & generated Col.]

### • COLUMN OPS

(a) alter table TABLE\_NAME [position: FIRST | AFTER]  
add column\_name varchar(50) [after lastname, Column],  
add column\_name2 varchar(200) [after firstName Col],  
add column\_name3 Varchar(25),  
add column\_name4 Int[First];

(b) alter table TABLE\_NAME <sup>Drop</sup> ~~Modify~~ Col Name  
drop column\_name,  
drop column\_name2,  
drop column\_name3;

(c) alter table TABLE\_NAME [modify datatype]  
alter <sup>column</sup> COLUMN\_NAME (NEW\_COLUMN\_DATA TYPE);

(d) alter table TABLE\_NAME [modify columnName]  
<sup>mysql Version 5.7 & Earlier.</sup> ~~change~~ alter ~~OLD~~ COLUMN\_NAME to NEW\_COLUMN\_NAME  
// rename column col\_name to new\_colname;

### • TABLE OPS.

The most important activity in "alter" in table ops are:

- Renaming Tables -
- Adding & Dropping Constraints
- Change Storage Engines

(e) Renaming Tables Using "alter"  
alter table TABLE\_NAME  
alter TABLE\_NAME to NEW\_TABLE\_NAME;



(f) // Adding Constraints.

\* "Check", "unique", "primary" & "foreign key"  
Syntax require ADD <sup>key</sup>

(i) Primary Key

alter table TABLE\_NAME  
add [Constraint] primary key (col-name);

Foreign Key

alter table TABLE\_NAME  
add [Constraint] foreign key (col-name) =

(ii) FOREIGN KEY

alter table TABLE\_NAME  
add constraint foreign key (column\_name) references  
reference\_table (referenced\_column);

(iii) unique

alter table TABLE\_NAME  
add constraint constraint\_name unique  
(column\_name);

(iv) CHECK

alter table table\_name  
add constraint constraint\_name  
check (condition);

(v) NOT NULL Constraint

alter table table\_name  
modify column\_name datatype not null;

(vi) DEFAULT Constraint

alter table table\_name  
alter column\_name set default default\_value;



# DQL

Git

Data Query Language. Basically, the 'SELECT' Statement.

⇒ Select First Name, last name from Employee  
where Emp\_ID > 5 AND < 2;  
Comparison Operator

## DDL

- Aggregates & Filters
- Joins
- Keywords.
- Aggregating keywords: Groupby & Having.
- Aggregate functions: Sum, Avg, Max, Min, Count
- Constraints
- Database objects: Table, View, Synonym, Sequence, Index & Triggers
- vscode, Git Hub command & Desktop.
- **CICD** - Continuous Integration & Continuous Deployment.

## HIVE FOR STRUCTURE DATA.

Developed by Facebook; SQL like.

Extension: Hive Query Language .HQL.

Components.

- Hive Server / Meta Store - Stores meta data

Runs Query  
High Availability.

- Its a bridge & the real meta data is stored in the RDBMS by 3rd party e.g. sql, Oracle, postgresql.

(Transactional) Types of Tables in Hive

Managed

CRUD (create, update, read, delete)

with an ORC file format

with ACID compliance. It makes it transactional.

External Table (WORM): write Once Read Many.

located anywhere

No update (Read only)