

## 20 Ques on Phase-4, Alter and Cases

### Beginner (Q1–Q6)

- Use ALTER TABLE to add a new column bonus INT.
- Use ALTER TABLE to rename column salary to base\_salary.
- Use ALTER TABLE to drop the column hire\_date.
- Use ALTER TABLE to change datatype of bonus to DECIMAL(10,2).
- Write a CASE statement to classify employees: if salary > 50000 "High", else "Low".
- Write a CASE statement to label employees: if department is NULL "Unassigned", else show department.

### Intermediate (Q7–Q13)

- Add a new column experience\_level VARCHAR(20) using ALTER TABLE.
- Update experience\_level using CASE:
  - If hire\_date < '2018-01-01' "Senior"
  - Else "Junior"
- Use CASE to calculate a new column tax:
  - If salary > 50000 20% of salary
  - Else 10% of salary
- Use CASE to categorize employees by department:
  - IT "Tech Team"
  - HR "Support Team"
  - Finance "Money Team"
  - Else "Other"
- Use ALTER TABLE to add a constraint: salary must be > 0.
- Use ALTER TABLE to set default value of bonus as 5000.
- Use CASE to show a column status:
  - If hire\_date < '2020-01-01' "Old Employee"
  - Else "New Employee"

### Advanced (Q14–Q20)

- Use ALTER TABLE to add a foreign key dept\_id referencing a new departments table.
- Use ALTER TABLE to drop the constraint on salary.
- Use CASE inside an aggregate query: count how many employees fall into "High Salary" vs "Low Salary".
- Use CASE to calculate performance bonus:
  - IT salary \* 0.15
  - HR salary \* 0.10
  - Finance salary \* 0.20
  - Else salary \* 0.05
- Use CASE to show a column city\_group:
  - If city IN ('Lucknow','Delhi') "North"
  - If city IN ('Mumbai','Pune') "West"
  - Else "Other"
- Use ALTER TABLE to rename table employees to staff.
- Use CASE with ORDER BY: sort employees by salary category (High first, then Low).