

# Mentoring Session Week 3

Pl. ensure that “hr” database is created or downloaded from MYSQL sample databases before getting started with this exercise.

Once MySQL workbench is launched, spend couple of minutes in familiarising participants with MYSQL Workbench options

Before taking this session, please ensure that participants are well aware and familiar with basic MYSQL commands as in this session focus in on Joins and subquery.

## Section A: Joins and Sub-Queries

1. Execute following basic commands to get started with the session

```
show databases;
```

```
USE hr;
```

```
show tables;
```

2. Write a query in SQL to display those employees who contain a letter z to their first name and also display their last name, department, city, and state province. (3 rows)
3. Write a query in SQL to display the job title, department id, full name (first and last name) of employee, starting date and end date for all the jobs which started on or after 1st January, 1993 and ending with on or before 31 August, 2000. (8 rows)
4. Display the employee number, name (first name and last name) and job title for all employees whose salary is smaller than the minimum salary of those employees whose job title is Programmer using subquery. (44 rows)

5. Write a query in SQL to display the country name, city, and number of those departments where at least 2 employees are working. (5 rows)
6. Write a query to fetch the employee ID, First Name, Last Name, Salary and Department ID of those employees who draw a salary more than the average salary of their respective department. (38 rows)
7. Write a query in SQL to display the first and last name, salary, and department ID for those employees who earn less than the average salary, and also work at the department where the employee Laura is working as a first name holder. (41 rows)
8. Using HR Schema, write a Query to find the maximum salary of the most recent job that every employee holds.
9. Using HR Schema, write a Query to List the old designation and new designation of all the employees in the company where old designation is not null. (10 rows)
10. Retrieve the employee details along with the highest salary of their department and the difference between their salary and the highest salary:
11. Write an SQL query to retrieve the employee details, including their ID, first name, last name, and the average salary within a range that includes the current employee's salary and the salaries of the preceding and succeeding employees based on their hire dates.
12. Find the average salary of employees in each department, along with the highest-paid employee details within that department. Additionally, you want to display the department name, manager name, and location details for each department.

### Section B: General Queries without using any dataset

- Write a Query to display the word 'Great Learning' by removing the vowels.
- Write a Query to remove all the leading and trailing exclamatory marks from the string '!!!!Great Learning!!!!!!'.

- Write a Query to divide the number 100 by 3 and print the remainder after division.
- Display 'Great Learnings' in capital letter
- Display the difference between '2020-01-21' and '2020-01-21'
- Display the age if the date of birth is '1999-09-08'
- Display '1' if  $2 > 0$  condition is true otherwise display '0'
- Display the square of 9