1. Retrieve all country\_id, country name, region id, region name from both countries and regions tables (inner join)

SELECT Countries.country\_ID, Countries.country\_name, Regions.region\_name

FROM Countries

INNER JOIN Regions

ON countries.Region\_ID = Regions.region\_ID

1. Retrieve all cities, country names from both countries and locations tables (inner join)

SELECT Countries.country\_name, Locations.city

FROM Countries

INNER JOIN Locations

ON countries.Country\_ID = Locations.country\_ID

1. Retrieve the first name, last name, department number, and department name for all employees for departments 80 or 40 (inner join)

SELECT Employees.first\_name, Employees.last\_name, Employees.department\_ID, Departments.department\_Name

FROM Employees

INNER JOIN Departments

ON Employees.department\_ID = Departments.department\_ID

WHERE Departments.Department\_ID IN ('80','40');

1. Retrieve employees' first name, last name department id and all departments including those where do not have any employee (Right join)

SELECT Employees.first\_name, Employees.last\_name, Employees.department\_ID, Departments.department\_Name

FROM Employees

RIGHT JOIN Departments

ON Employees.department\_ID = Departments.department\_ID;

1. Retrieve the first name, last name, department number, and name, for all employees including those who have or do not have any department (left join)

SELECT Employees.first\_name, Employees.last\_name, Employees.department\_ID, Departments.department\_Name

FROM Employees

LEFT JOIN Departments

ON Employees.department\_ID = Departments.department\_ID;

1. Display all employee and their manager's full names (Self join)

SELECT Employees.first\_name, Employees.last\_name, Employees.department\_ID, Departments.department\_Name

FROM Employees

LEFT JOIN Departments

ON Employees.department\_ID = Departments.department\_ID;

1. Find all employees who have the same hire dates (Self join)

SELECT E1.first\_name || ' Was Hired With '|| E2.First\_name

FROM Employees E1, Employees E2

WHERE E2.Hire\_date = E1.Hire\_Date;

1. Retrieve all employees and jobs history data from both employees and job\_history tables (left join)

SELECT E.\*, J.\*

FROM Employees E

LEFT JOIN Job\_History J

ON E.Employee\_ID = J.Employee\_ID;

1. Write a SQL query to find those employees whose first name contains a letter ‘z’. Return first name, last name, department, city, and state province (multiple left joins)

SELECT E.first\_name, E.last\_name, D.department\_name, L.city, l.state\_province

FROM Employees E

LEFT JOIN Departments D

ON E.department\_ID = D.department\_ID

LEFT JOIN Locations L

ON D.location\_ID = L.Location\_ID;

WHERE E.first\_name LIKE '%z%';

1. Write a SQL query to find all departments including those without any employees. Return first name, last name, department ID, department name (Right join)

SELECT E.first\_name, E.last\_name, D.department\_name, D.department\_ID

FROM Employees E

RIGHT JOIN Departments D

ON D.Department\_ID = E.Department\_ID;

1. Write a SQL query to find the employees and their managers. These managers do not work under any manager (left join)

SElECT E1.first\_name, E1.last\_name || ' Works for ' || E2.first\_name, E2.last\_name

FROM Employees E1

LEFT JOIN Employees E2

ON E1.Employee\_ID = E2.Manager\_ID;

1. Write a SQL query to find those employees who work in a department where the employee of last name 'Taylor' works. Return first name, last name and department ID (Self join)

SELECT E1.first\_name, E1.Last\_name, E2.Department\_ID

FROM Employees E1, Employees E2

WHERE E1.first\_name = E2.first\_name AND e1.last\_name= 'Taylor';

??????

1. Write a SQL query to find the name of the country, city, and departments, which are running there (inner join)

SELECT Countries.country\_name, Locations.city, Departments.department\_name

FROM Locations

INNER JOIN Countries

ON Locations.country\_ID = Countries.country\_ID

INNER JOIN Departments

ON Locations.location\_ID = Departments.location\_ID;

1. Write a SQL query to find the department name and the full name (first and last name) of the manager (inner join)

SELECT D.department\_name, E.first\_name || ' '|| E.last\_name AS "Full Name"

FROM Departments D

INNER JOIN Employees E

ON D.Manager\_ID = E.Manager\_ID

ORDER BY D.department\_name;

1. Write a SQL query to find those employees who earn $12000 and above. Return employee ID, starting date, end date, job ID and department ID (inner join).

SELECT E.Employee\_ID, JH.start\_date, JH.end\_date, JH.job\_ID, JH.department\_ID

FROM Employees E

INNER JOIN Job\_History JH

ON E.Employee\_ID = JH.Employee\_ID

WHERE E.Salary >= 12000;

1. Write a SQL query to find full name (first and last name), and salary of those employees who work in any department located in 'London' city (inner join).

SELECT E.first\_name || ' '|| E.last\_name AS "Full Name", E.Salary, D.department\_name, L.City

FROM Departments D

INNER JOIN Locations L

ON D.location\_ID = L.location\_ID

INNER JOIN Employees E

ON D.department\_ID = E.department\_ID

WHERE L.City = 'London';

Shortcut: **USING**

SELECT E.first\_name || ' '|| E.last\_name AS "Full Name", E.Salary, D.department\_name, L.City

FROM Departments D

INNER JOIN Locations L USING(location\_ID)

INNER JOIN Employees E USING(department\_ID)

WHERE L.City = 'London';