SQL - MLS - Queries

Part A - DDL & DML queries

Execute following basic commands to get started with the session

```
show databases;
use hr;
show tables;
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1. Fetch all the records for the Employees Table. Explain the meaning of “*”.
2. Show all the emp_id, first_name, last_name from employee Table.
3. Write a query in SQL to display the first_name and last_name, department_id and salary from employees Table who earn more than 20000.('Steven', 'King', '90', '24000.00'). 4
4. Write a query in SQL to display the first_name and last_name, email, salary and manager_ID for those employees whose managers_ID is 120, 103 or 145.(18 rows)
5. Write a query in SQL to display the first_name and last_name, department_id and salary from employees Table who earn more than 8000 And whose managers_ID is 120, 103 or 145.(3 rows)
6. Write a query to display all the locations (id, city) which do not have any state province mentioned. (6 rows) [NOTE: LOCATION TABLE]
7. Write a query to display job_id, job titles, min_salary, max_salary whose maximum salary is greater than 10000. (9 rows) [NOTE: JOBS TABLE]
8. Write a query to display department_id,department_name, Manager_id whose manager_id is greater than 200 and location_id is 2400.(1 row) [NOTE : DEPARTMENTS TABLE]
9. Write a query to display the job title whose minimum salary is greater than 8000 and max salary less than 20000 (3 rows).[NOTE : JOBS TABLE]
10. Write a query to retrieve all the records of departments with managers for the location id 1700. (5 rows) [NOTE : DEPARTMENTS TABLE]
11. List all departments starting with “P” where there are managers.(2 rows)[NOTE:DEPARTMENT TABLE]
12. Print a bonafide certificate for an employee (say for emp. id 123) as below: #"This is to certify that <full name> with employee id <emp. id> is working as <job id> in dept. <dept ID>. (1 ROW) [NOTE : EMPLOYEES table].

13. Write a query to display the employee id, salary & salary range of employees as 'Tier1', 'Tier2' or 'Tier3' as per the range <5000, 5000-10000, >10000 respectively, ordering the output by those tiers.(107 ROWS)[NOTE :EMPLOYEES TABLE]
14. Write a query to display the department-wise and job-id-wise total salaries of employees whose salary is more than 25000.(8 rows) [NOTE : EMPLOYEES TABLE]
15. Write a query to display names of employees whose first name as well as last name ends with vowels. (vowels : aeiou) (5 rows) [NOTE : EMPLOYEES TABLE]
16. What is the average salary range (diff. between min & max salary) of all types 'Manager's and 'Clerk's. (9 rows)[NOTE : JOBS TABLE]
17. Write a query to list the names of all people who report to the same person in department Accounting (i.e.2).
18. Write a query in SQL to display the first name, last name, department number, and department name for each employee. (106 rows)
19. Write a query in SQL to display the name of the department, average salary and number of employees working in that department who got commission. (One row)
20. Display the first name where commission percentage is not provided. (72 rows)
21. Display first_name , commission and where commission is null print 'Its Null' otherwise print 'It's not null' (107 Rows)

Part B - Joins and Subqueries

1. 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)
2. 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)
3. 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)
4. 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)
5. 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)
6. 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)

7. Using HR Schema, write a Query to find the maximum salary of the most recent job that every employee holds.
8. 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)