SQL Queries

Create the following Tables:

LOCATION	
Location_ID	**Regional_Group**
122	NEW YORK
123	DALLAS
124	CHICAGO
167	BOSTON

DEPARTMENT		
Department_ID	**Name**	**Location_ID**
10	ACCOUNTING	122
20	RESEARCH	124
30	SALES	123
40	OPERATIONS	167

JOB	
Job_ID	**Function**
667	CLERK
668	STAFF
669	ANALYST
670	SALESPERSON
671	MANAGER
672	PRESIDENT

EMPLOYEE									
EMPLOYEE_ID	LAST_NAME	FIRST_NAME	MIDDLE_NAME	JOB_ID	MANAGER_ID	HIREDATE	SALARY	COMM	DEPARTMENT_ID
7369	SMITH	JOHN	Q	667	7902	17-DEC-84	800	NULL	20
7499	ALLEN	KEVIN	J	670	7698	20-FEB-85	1600	300	30
7505	DOYLE	JEAN	K	671	7839	04-APR-85	2850	NULL	30
7506	DENNIS	LYNN	S	671	7839	15-MAY-85	2750	NULL	30
7507	BAKER	LESLIE	D	671	7839	10-JUN-85	2200	NULL	40
7521	WARK	CYNTHIA	D	670	7698	22-FEB-85	1250	500	30

Queries based on the above tables:

Simple Queries:

1. List all the employee details
2. List all the department details
3. List all job details
4. List all the locations
5. List out first name,lastname,salary, commission for all employees
6. List out employee_id,lastname,department id for all employees and rename employee id as "ID of the employee", last name as "Name of the employee", department id as "department ID"
7. List out the employeesanuual salary with their names only.

Where Conditions:

8. List the details about "SMITH"
9. List out the employees who are working in department 20

10. List out the employees who are earning salary between 3000 and 4500

11. List out the employees who are working in department 10 or 20

12. Find out the employees who are not working in department 10 or 30

13. List out the employees whose name starts with "S"

14. List out the employees whose name start with "S" and end with "H"

15. List out the employees whose name length is 4 and start with "S"

16. List out the employees who are working in department 10 and draw the salaries more than 3500

17. list out the employees who are not receiving commission.

Order By Clause:

18. List out the employee id, last name in ascending order based on the employee id.

19. List out the employee id, name in descending order based on salary column

20. list out the employee details according to their last_name in ascending order and salaries in descending order

21. list out the employee details according to their last_name in ascending order and then on department_id in descending order.

Group By & Having Clause:

22. How many employees who are working in different departments wise in the organization

23. List out the department wise maximum salary, minimum salary, average salary of the employees

24. List out the job wise maximum salary, minimum salary, average salaries of the employees.

25. List out the department id having atleast four employees.

Sub-Queries

26. Display the employee who got the maximum salary.

27. Display the employees who are working in Sales department

28. Display the employees who are working as “Clerk”.

29. Display the employees who are working in “New York”

30. Find out no.of employees working in "Sales" department.

31. Update the employees salaries, who are working as Clerk on the basis of 10%.

32. Delete the employees who are working in accounting department.

33. Display the second highest salary drawing employee details.

JOINS

Simple join

34. List our employees with their department names
35. Display employees with their designations (jobs)
36. Display the employees with their department name and regional groups.
37. How many employees who are working in different departments and display with department name.
38. How many employees who are working in sales department.
39. Which is the department having greater than or equal to 5 employees and display the department names in ascending order.
40. How many jobs in the organization with designations.
41. How many employees working in "New York".

Self Join:

42. Display the employee details with their manager names.
43. Display the employee details who earn more than their managers salaries.
44. Show the no. of employees working under every manager.

Outer Join:

45. Display employee details with all departments.
46. Display all employees in sales or operation departments.

Answers

1. SQL > Select * from employee;
2. SQL > Select * from department;
3. SQL > Select * from job;
4. SQL > Select * from loc;
5. SQL > Select first_name, last_name, salary, commission from employee;
6. SQL > Select employee_id "id of the employee", last_name "name", department id as "department id" from employee;
7. SQL > Select last_name, salary*12 "annual salary" from employee
8. SQL > Select * from employee where last_name='SMITH';
9. SQL > Select * from employee where department_id=20
10. SQL > Select * from employee where salary between 3000 and 4500
11. SQL > Select * from employee where department_id in (20,30)
12. SQL > Select last_name, salary, commission, department_id from employee where department_id not in (10,30)
13. SQL > Select * from employee where last_name like 'S%'
14. SQL > Select * from employee where last_name like 'S%H'
15. SQL > Select * from employee where last_name like 'S___'
16. SQL > Select * from employee where department_id=10 and salary>3500
17. SQL > Select * from employee where commission is Null
18. SQL > Select employee_id, last_name from employee order by employee_id
19. SQL > Select employee_id, last_name, salary from employee order by salary desc
20. SQL > Select employee_id, last_name, salary from employee order by last_name, salary desc
21. SQL > Select employee_id, last_name, salary from employee order by last_name, department_iddesc
22. SQL > Select department_id, count(*), from employee group by department_id
23. SQL > Select department_id, count(*), max(salary), min(salary), avg(salary) from employee group by department_id
24. SQL > Select job_id, count(*), max(salary), min(salary), avg(salary) from employee group by job_id
25. SQL > Select department_id, count(*) from employee group by department_id having count(*)>=4
26. SQL > Select * from employee where salary=(select max(salary) from employee)

27. SQL > Select * from employee where department_id IN (select department_id from department where name='SALES')
28. SQL > Select * from employee where job_id in (select job_id from job where function='CLERK'
29. SQL > Select * from employee where department_id=(select department_id from department where location_id=(select location_id from location where regional_group='New York'))
30. SQL > Select * from employee where department_id=(select department_id from department where name='SALES' group by department_id)
31. SQL > Update employee set salary=salary*10/100 wehrejob_id=(select job_id from job where function='CLERK')
32. SQL > delete from employee where department_id=(select department_id from department where name='ACCOUNTING')
33. SQL > Select * from employee where salary=(select max(salary) from employee where salary <(select max(salary) from employee))
34. SQL > Select employee_id, last_name, name from employee e, department d where e.department_id=d.department_id
35. SQL > Select employee_id, last_name, function from employee e, job j where e.job_id=j.job_id
36. SQL > Select employee_id, last_name, name, regional_group from employee e, department d, location l where e.department_id=d.department_id and d.location_id=l.location_id
37. SQL > Select name, count(*) from employee e, department d where d.department_id=e.department_id group by name
38. SQL > Select name, count(*) from employee e, department d where d.department_id=e.department_id group by name having name='SALES'
39. SQL > Select name, count(*) from employee e, department d where d.department_id=e.department_id group by name having count (*)>=5 order by name
40. SQL > Select function, count(*) from employee e, job j where j.job_id=e.job_id group by function
41. SQL > Select regional_group, count(*) from employee e, department d, location l where e.department_id=d.department_id and d.location_id=l.location_id and regional_group='NEW YORK' group by regional_group
42. SQL > Select e.last_nameemp_name, m.last_name, mgr_name from employee e, employee m where e.manager_id=m.employee_id
43. SQL > Select e.last_nameemp_name, e.salaryemp_salary, m.last_name, mgr_name, m.salarymgr_salary from employee e, employee m where e.manager_id=m.employee_id and m.salary
44. SQL > Select m.manager_id, count(*) from employee e, employee m where e.emSployee_id=m.manager_id group by m.manager_id

45. SQL > Select last_name, d.department_id, d.name from employee e, department d where e.department_id(+)=d.department_id
46. SQL > Select last_name, d.department_id, d.name from employee e, department d where e.department_id(+)=d.department_id and d.department_idin (select department_id from department where name IN ('SALES','OPERATIONS'))