

Write SQL queries using the following default tables of Oracle...

Description of the table EMP:

Name	Null?	Type
EMPNO	NOT NULL	NUMBER(4)
ENAME		VARCHAR2(10)
JOB		VARCHAR2(9)
MGR		NUMBER(4)
HIREDATE		DATE
SAL		NUMBER(7,2)
COMM		NUMBER(7,2)
DEPTNO		NUMBER(2)

Description of the table DEPT:

Name	Null?	Type
DEPTNO	NOT NULL	NUMBER(2)
DNAME		VARCHAR2(14)
LOC		VARCHAR2(13)

Description of the table SALGRADE:

Name	Null?	Type
GRADE		NUMBER
LOSAL		NUMBER
HISAL		NUMBER

Experiment No : 01

Write sql queries for the following

Objectives: To learn **SELECT** statement, **WHERE** clause with conditions.

- (a) List the names and code of all employees.
- (b) List the names , employee code and department code of all managers.
- (c) List the names, employee code and salary of all clerks.
- (d) List the names, employee code and hiredate of all analysts.
- (e) List the employees whose salary less than 1000.
- (f) List the employees whose salary greater than 4000.
- (g) List the name of all employees who are either clerks or salesman or analyst.
- (h) List all manager who earn more than 4000.
- (i) List all clerks and salesman who earn more than 1600.
- (j) List the names and salaries of all employees who were joined as manager during 1981.
- (k) List the names of the clerks working in the department 20.
- (l) List the details of the employees who have joined before the end of September 81.
- (m) List the names of the employees who are not managers.

Experiment No: 02

Write the Sql queries for the following

Objectives: To learn IN, BETWEEN , LIKE, IS NULL and NOT operators.

- (a) List the employees whose salaries are 800, 1600 or 2450.
- (b) List the names of the employees whose employees numbers 7369, 7521, 7839, 7934, 7788.
- (c) List the employees whose salaries lies between 2000 and 3000.
- (d) List the employee names who have joined before 30th june 81 and after December 81.
- (e) List the employee name starts with 'F'.
- (f) List all employee whose names ends with 'N'.
- (g) List the names and job of all employees who have names exactly 5 characters in length.
- (h) List the names and job of all employees whose name exactlt 5 characters in length and ends with 'S'.
- (i) List the employee names having 'F' as the second character.
- (j) List the employee those who are not getting commission.
- (k) List the employee those who are getting commission.
- (l) List the details of the employees whose salary is greater than 2000 and not eligible for commission.
- (m) List all employees who have not joined between 1/1/81 and 31/12/81.
- (n) List all employees whose job does not start with 'CL'.
- (o) List the names of the employee and designation (job) of the employee who does not report to anybody (who does not have manager)

Experiment No: 03

Write Sql queries of the following

Objectives: To learn **ORDER BY** clause, **DISTINCT** clause , **Renaming columns using alias**, **Computations on table data**.

- (a) List the different jobs available in the emp table.
- (b) List the employee number , name and salary in ascending order of salary.
- (c) List the employee name and hiredate in descending order of hiredate.
- (d) List the name, salary and PF amount of all the employees(PF is calculated as 10% of salary).
- (e) List the employee name, salary, PF, HRA, DA and gross salary, order the result in ascending order of gross. HRA is 50% of salary and DA is 30% of salary.

Experiment No: 04

Write Sql queries of the following

Objectives: To Learn aggregate functions, group by clause, having clause.

1. Find the minimum, maximum and average salaries earned by a employee.
2. Find the minimum, maximum and average salaries earned by a clearks.
3. Calculate total no of employees.
4. Calculate total no of managers.
5. Calculate the number of employees who are not getting any commission.
6. Calculate the number of employees who are getting commission.
7. List the total number of employees and the average salaries of the different departments.
8. List the average salaries for each different job.
9. Display the minimum, maximum and average salaries for each job groups.
10. Find the details of the employees in ascending order of department number, and within each department in descending order of salary.
11. Display the name, deptno and salary of each employees in order salary and deptno.
12. List the department number and the total salary payable in each department .
13. List the jobs and number of employees in each job. the result should be in descending order of employees.
14. List the average salary from each job excluding manager.
15. List the average salary for each job type within department.
16. List the average salary for all departments employing more than five people.
17. Find all departments which have less than 4 employees.
18. List job of all employees where maximum salary is greater than or equal to 3000.
19. List the total salary , maximum and minimum salary and the average salary of employees job wise for department no 20 and display only those rows having average salary greater than 2000.

Assignment 05:

Write Sql queries of the following

Objectives: To Learn sub query and joining.

- 1. Display the name of employee who earns maximum salary.**
- 2. Display the name of employee who earns maximum salary whose job is salesman.**
- 3. Display the department number whose salary is maximum.**
- 4. List the employees earns more than any employee in CHICAGO.**
- 5. List the name of the employee who works in the same department as SMITH.**
- 6. List the name of the employee job is same as CLARK.**
- 7. List the name of the employee whose salary is more than TURNER.**
- 8. List the name of employee who joined after ALLEN.**
- 9. Display the name of the department whose job is SALESMAN.**
- 10. Display the name of the department in which FORD works.**
- 11. Display the name of the department whose salary is maximum.**
- 12. 12. Display the name of the city(location) in which SMITH works.**
- 13. 13. Display the name of the city in which the manager works.**
- 14. 14. Display the grade of the employee named MARTIN.**
- 15. 15. Display the name of the department which has no employee.**
- 16. 16. List the name of the department who gets commission.**
- 17. 17. List the employees who work in the same post as SMITH.**
- 18. 18. List all employees who earn more than every employee in the Sales**
- 19. department.**
- 20. 19. Display the department number whose average salary is maximum.**

Assignment 06:

Write Sql queries of the following

Objectives: To Learn sub query , joining and self-joining.

- 1. List all employee names, dept name and the city in department name order.**
- 2. List the employee name , dept number, dept name and salary.**
- 3. List the employee working in Dallas in descending order in salary.**
- 4. List all employees name , job and salary and department name for everyone in the company except clerks. Sort the report with respect to job and salary.**
- 5. List the name , employee number and their manager name, and manager number.**
- 6. List name, employee number and the name , employee number of their managers manager.**
- 7. List the name of the employee who joined in the same year of ADAMS.**
- 8. List the name of the employee who joined in the same month of BLAKE.**
- 9. List the name of the employee who joined in the same date of ADAMS.**
- 10. List all employee who work in Boston and earn more than any**
- 11. employee working in Chicago.**
- 12. 11. List the employees who earn the lowest salary in their respective dept.**
- 13. 12. List the job with the highest average salary.**
- 14. 13. List the name , jobs and salaries of employees whose salary is greater**
- 15. than the highest salary in Operations dept.**
- 16. 14. List the top 10 earners in the company.**
- 17. 15. List the top 2 earner in each department.**
- 18. 16. List the year and the number of people joining in that year.**

Assignment 07:

Write Sql queries of the following

Objectives: To Learn table creation, insertion and update and modification of table and constraints.

- 1. Create a Account table with following attribute
Acc_no(4),Acc_type(1),Cust_no1(6),Cust_no2(6) Opp_date.**
- 2. Create the same table using Not Null on all and Default on Opp_date
constraint.**
- 3. Add a field called Balance(7,2) to the table account.**
- 4. Increase the field of Acc_no to 6.**
- 5. Disable the constraint of Acc_type.**
- 6. Remove the constraint of Cust_no2.**
- 7. Remove the table from the database.**

Assignment 08:

Write Sql queries of the following

Objectives: To Learn table creation, insertion and update and modification .

1. Create a table called **CRICKETERS**, with columns as specified below:

<u>Column name</u>	<u>Description</u>
Country	Character string
Name	Character string(max length 20)
Runs	Number
Wickets	Number
Catches	Number
Date_of_barth	date

The Country and Name field should be declared NOT NULL.

2. Modify the table **CRICKETERS** to

- a) Add a field Centuries, which will add the number of centuries scored.
- b) Add a field Five's , which hold the number at times he has taken five wickets in a innings.
- c) A Boolean field Caption , indicating the whether the person is currently the captain of the team.

Assignment 09:

Write PL/Sql of the following

Objectives: To Learn pl/sql block, procedure,function, cursor and trigger .

- 1. Write a PL/SQL block which will accept a value from the user and it will insert the factorial result into a table called result.**
- 2. Write a PL/SQL procedure which will calculate whether a number is odd or even.**
- 3. Write a PL/SQL function that will calculate the factorial of a given number.**
- 4. Create a cursor that will fetch all the row from the table a where A is greater than 50 and insert those rows into the table b.**
- 5. Write a trigger on table a that will execute when we run any update operation on it and the trigger will insert the old value on table b.**