

Database Systems

Fall 2020

LAB – 06

The objective of this lab is to:

- SQL Self Joins
- Previous Content (Group by, Order by, Column Alias, Table Alias)

Course & Lab Instructor: Sir Asif Sohail

Instructions:

- Work on this lab individually. Discussion is not allowed.
- Evaluation of tasks will be conducted in lab.
- Anyone caught being indulged in the act of plagiarism would be awarded an "F" grade in this lab.
- Evaluation will be considered final and you cannot debate for the marks. So, focus on performing the tasks when the time is given to you.
- **Allowed time: 1 hour and 15 minutes**
- Best of Luck!

Note: You will be using following tables in your lab tasks.

- EMP (EMPNO, ENAME, JOB, SAL, HIREDATE, COMM, MGR, DEPTNO)
- DEPT (DEPTNO, DNAME, LOC)
- SALGRADE (Grade, HISAL, LOSAL)

 **Perform the following tasks**

Task 01:

[3 Marks]

1. Create a query to display the deptno, the salary for that job based on the department number and the total salary all departments group by jobs. **[2 Marks]**

DEPTNO	CLERK SAL	ANALYST SAL	SALESMAN SAL	MANAGER SAL	PRESIDENT SAL	SUM(SAL)
30	950	-	5600	2850	-	9400
10	-	-	-	2450	5000	7450
20	1900	6000	-	2975	-	10875

Query:

Screenshot:

2. Find the maximum and minimum sal from employee table in following format **[1 Mark]**

TYPE	SALARY
MAXIMUM	5000
MINIMUM	800

Query:

Screenshot:

Task 02: (Joins) [10 Marks]

1. Find the manager name of 'scott' **[2 Marks]**

Query:

Screenshot:

Employee Name	Manager Name
SCOTT	JONES

2. Display the manager name, manager number and salary of the lowest paid employee for the manager. Exclude anyone whose manager is not known. Sort the output in descending order of the salary. **[2 Marks]**

ENAME	MGR	min_sal
JONES	7566	3000
KING	7839	2450
SCOTT	7788	1100
BLAKE	7698	950
FORD	7902	800

Query:

Screenshot:

3. Write the query to display all records having same job as 'FORD'. **[2 Marks]**

Query:

Screenshot:

ENAME	JOB	ENAME	JOB
SCOTT	ANALYST	FORD	ANALYST
FORD	ANALYST	FORD	ANALYST

4. Write a query to display first half of employee name separated by colon ':' followed by second half of manager name. **[2 Marks]**

EMP NAME : MGR NAME
SCO:NES
FO:NES

Query:

Screenshot:

5. Write a query to display those employees name having same salary in two separate columns. **[2 marks]**

ENAME	ENAME
MARTIN	WARD
WARD	MARTIN

Query:

Screenshot:

Task 03: (Subquery) **[12 Marks]**

1. Write a query to show those employees hired after 'CLARK'. **[2 Marks]**

ENAME	Hire Date
MARTIN	September 28, 1981
SCOTT	December 09, 1982

Query:

Screenshot:

2. Write a query to display the name of manager who is supervising 2 or less employees **[2 Marks]**

ENAME
SCOTT
FORD

Query:

Screenshot:

3. Display the deptno, dname, loc of that department in which all the employees earn no commission. **[2 Marks]**

Query:

Screenshot:

4. List Those Department Who Does Not Have Any Employees using subquery.

Query:

Screenshot:

5. Get those employees who have commission greater than any employee of department no. 30. **[2 Marks]**

Query:

Screenshot:

6. Find the deptno having maximum number of employees. **[2 Marks]**

DEPTNO	Max No. Of Employees
30	6

Query:

Screenshot:

******Best of Luck******