Hope you are fine and feeling comfortable and excited to play with Structured Query Language (SQL) in this lab. You have been taught in the lecture about SQL and query writing. Why not get all that you have learned with hands-on experience? So, Let's Start!

The objective of this lab is to:

1. Practice Case, Decode
2. Practice Joins

Course & Lab Instructor: Sir Asif Sohail

Instructions:

- Gossips are not allowed. So be gentle and do what you know. The lab is not to deduct your sessional marks but to prepare you to achieve good marks in quizzes, mids and finals and finally have good grades. So, try to perform all your tasks in time and at your own.
- Teacher assistants are for your help, so be nice with them. Respect them as they are teaching you. Raise your hands if you have some problem and need help from TA.
- Avoid calling them by raising your voice and disturbing the environment of Lab.
- You must revise the content of the past lectures before starting the lab, it will help you resolve most of your general queries and give you the confidence that you can do it.
- 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.
- TA may deduct your marks for any kind of ill-discipline or misconduct from your side.
- Evaluation of tasks will be conducted in lab.
- Anyone caught being indulged in the act of plagiarism would be awarded an "F" grade in lab.
- Finally, pray before you start. And, Best of Luck!
- **Max Time: 50mins.**
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Task 01: [20 Marks]

1. Write three different ways to output empno, ename, job, sal,deptno,dname.
2. List empno, ename, job, sal, grade of all employees of grade 3.
3. List all employees whose location is 'CHICAGO'.
4. WRITE A QUERY THAT DISPLAYS ALL THE EMPLOYEES THAT HAVE SALARY GRADE OF 2 OR THEY BELONG TO 'CHICAGO'.
5. Show the employees of Accounting department.
6. Write a query to display the following output.

DNAME	Employees
ACCOUNTING	3
RESEARCH	5

SALES	6
-	14

7. List all departments that have more than 3 employees.
8. The organization has decided to give bonus to its employees as per their grades. The employees with grades 1,2,3,4,5 will be given a bonus of 500, 800, 1000, 1200, and 1500 respectively. Write a query to empno, ename, job, sal, deptno, grade, and bonus.
9. Write a query to display the output in the following format. :
   The manager of JONES is KING
   The manager of KING is None
10. Show the output like "Smith is the Clerk of Sales Department with salary 1600 from NewYork."
11. List empno, ename, job, sal, hiredate,deptno, dname, grade of all the employees.
12. List empno, ename, job, sal, grade without using join. The grade slabs are as per salgrade table.
13. Get the highest salaries of all the departments from dept table. Display the output in the following format.

1. DNAME	2. MAX-SAL
3. RESEARCH	4. 3000
5. SALES	6. 2850
7. ACCOUNTING	8. 5000
9. OPERATIONS	10. -

14. List the dept location, of job of those second half of ename, deptno and job in the asc order joined after the 1981.
15. Find the 'scott' manager name of
16. WRITE A QUERY THAT DISPLAY THE SALARY GRADES OF ALL EMPLOYEES THAT BELONGS TO SALES DEPARTMENT.
17. DISPLAY THE EMPLOYEE NAME AND EMPLOYEE NUMBER ALONG WITH THEIR MANAGER'S NAME AND MANAGER NUMBER. LABEL THE COLUMNS EMPLOYEE, EMP#, MANAGER, AND MGR#, RESPECTIVELY.
18. SHOW THE DATE OF OLDEST HIRED ANALYST AND ALSO SHOW THE SUM OF SALARY OF ALL ANALYSTS. NAME THE TWO COLUMNS PROPERLY.
19. LIST ALL EMPLOYEE DATA OF EMP AND THEM REGARDING DATA IN DEPT TABLE, ALSO DISPLAY THE REMAINING DATA OF DEPT.

20. COUNT NUMBER OF EMPLOYEES WHO WORKS IN ACCOUNTIONG DEPARTMENT

link will expire on 12:30pm.