

Database Systems

Fall 2020

LAB – 01

The objective of this lab is to:

1. Introduction to SQL language
2. Basic SQL queries.

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.
- **Max Time: 60mins.**



Kindly paste the query as well as result table screenshot as a result of each task

Sample:

Display All the Employees from emp table

Solution:

Select * from emp

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7369	SMITH	CLERK	7902	12/17/1980	800	-	20
7499	ALLEN	SALESMAN	7698	02/20/1981	1600	300	30
7521	WARD	SALESMAN	7698	02/22/1981	1250	500	30
7566	JONES	MANAGER	7839	04/02/1981	2975	-	20
7654	MARTIN	SALESMAN	7698	09/28/1981	1250	1400	30

Task 01:**[08 Marks]**

1. List all rows of the table DEPT.
2. List Department name and its location from the table DEPT.
3. List all Employees' numbers and Employees' names from EMP.
4. Select all the unique jobs from employee table. Name the column as '**Distinct Jobs**'.

Task 02:**[12 Marks]**

1. List ENAME and their taxes (Tax = SAL * 0.2).
2. Display Per Day Salary of All Employees. Name the column as '**Per day salary**'
3. Find the difference between high salary and low salary from SALGRADE.
4. Display Working Days of each employee with their names. (**Hint:** use SYSDATE to get current date)
5. Display the employee's name, salary, salary + commission as total salary, salary increase by 25% and label this column new salary, bonus (new salary - salary).

Note: Salary to be increased by 25% should be original salary.

employee name	SALARY	total salary	new salary	BONUS
ALLEN	1600	1900	2000	400
WARD	1250	1750	1562.5	312.5

6. Display grade and sum of high and low salary as Commulative Salary from Salgrade table.

Task 03:**[16 Marks]**

1. List the emps along with their hiredate having Per Day Salary less than Rs. 100.
2. List the employees working under the manager having id=7566. (mgr = 7566)
3. Display the house rent (35% of salary), medical allowance (12% of salary) of each employee.
4. List the emps who are either 'CLERK' or 'ANALYST' in the Desc order with respect to salary.
5. Display those employees who are not working in dept. 30.
6. Display the output in the following format. Rename the column Designation (**using alias**)

Designation

ALLEN work as SALESMAN

7. List all the employees except "MANAGER" and display in ascending order w.r.t salary.
8. Display the output in the format (Ename + sal + Annual Salary + Per Day Salary)

Emp Salary Details

SMITH having Monthly Salary 800 and Annual Salary 9600 and Per Day Salary
26.666666666666666666666666666667

ALLEN having Monthly Salary 1600 and Annual Salary 19200 and Per Day Salary 53.333333333333333333333333333333

Task 04: [3 Marks]

[3 Marks]

1. Will this statement execute successfully? (1 mark)

SeLeCt dNaMe fRom EmP

2. Identify all possible errors in the statement. (2 marks)

Select ENAME as Name of Employee, Job, Sal, Sal x 12 as salary from emp.