Database Systems

Fall 2020

LAB - 02

The objective of this lab is to:

- Practice Single row functions
 - Numeric
 - Character
 - **♣** NVL

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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 30 minutes
- Best of Luck!
- ♣ 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	сомм	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

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

- o EMP (EMPNO, ENAME, JOB, SAL, HIREDATE, COMM, MGR, DEPTNO)
- DEPT (DEPTNO, DNAME, LOC)

Perform the following tasks

Task 01: [20 Marks]

1. Write a query to display the no. of months an employee has worked from his hiring. Round off the no. of months.

- 2. List the employees those who joined in 1980.
- 3. List ename and Replace 'A' With '*' In All Employees' Name.
- 4. List the employees with salary greater than 1600 but should not be a manager or president.
- 5. Show the output of employees who has some commission. The output should be like "ward Is a Salesman with 500 commision". (Make sure the output exactly matches in terms of alphabets case letters)
- 6. List the employees whose name starts with "J" and end with "S".
- 7. List all the employees hired in leap years.
 - (A leap year is exactly divisible by 4 except for century years (years ending with 00). The century year is a leap year only if it is perfectly divisible by 400.)
- 8. Display first 2 and last 2 letters of employees' name within a single column named "formatted name".
- 9. Display the emp-code for all the employees consisting of first three letters of their job followed by hyphen followed by last 2 digits of the empno.
- 10. List the lowest and second lowest salary using the 'Top clause'

<u>Task 02:</u> [18 Marks]

- 1. Count the number of 'A's in the name of each employee.
- 2. Display the name, empno and job of all employees who name has 2nd or 2nd last character is 'I'.
- 3. Display the name, salary and job title of all employees who are not working under any employee or their commission value is null.
- 4. Display all the employees whose salary is three-digit number, ending with zero.
- 5. Display the total salary (salary + comm) of each employee. Make sure that total salary of any of employee is not null.
- 6. List all the employees name those are having six characters in their Names and having salary between 1000 and 4500.
- 7. Find the first and last two characters of enames.
- 8. Display the output in the following format (you are not allowed to use concatenation operator '||').

Name -> Salary SMITH---->800

9. Get firstname of the student from the column std_name. (Table Name: **PUCIT**) Like: **if std_name is Muhammad Afaq Shuaib, output = Muhammad**

	First Name
Muhammad	
Hafiz	

Task 03: (Viva)

1. A viva question from string manipulation function Concat, Substr, length, Instr, Ltrim, replace etc