



Faculty of Computing & Information Technology

Database Systems Lab

BS(SE) Morning - Fall 2022

LAB – 03

The objective of this lab is to:

1. Learn working with SQL Operators
2. SQL string and Date functions

Total Marks: 45

Course & Lab Instructor: Dr. Sanam Ahmed

Task 01: **[20 Marks]**

1. Generate a **salary report** of all the employees with their House rent, medical allowance, conveyance and tax and Take-Home Salary.

The percentages of the attributes are:

Home Rent: 10% of the original salary

Medical Allowance: 8% of the original salary

Conveyance: 9% of the original salary

Tax: 13% of the original salary

2. List all the employees who have dept 10 or 20, salary is between 2000 and 3000 and has Character S in their name.
3. List all employees show has J and N at start and end of their name respectively, such as JOHN and has more than 3 words in it.
4. Write a query to remove the first S from the name of the employees.
5. Display the 1-day salary of all employees without decimals
6. List all employees who have been working more than 30 years.
7. Write a query to tell the date when out Next Lab is Scheduled
8. Write a query to give the position of the first occurrence of Letter 'E' in job. Also display a column of jobs. JOBS SHOULD NOT BE REPEATED.
9. Display all employee's whose experience in years is an Even Number and Replace the characters A,B,C with @, \$, % in their names when displaying.
10. Display the number of Days you have lived so far.

Task 02:**[20 Marks]**

1. Count Number of A's in the name of each employee.
2. Display the EMPNO along with its reversed number
3. LIST ename, job, sal, comm, sal+comm of all employees. sal+comm should also be calculated for those whose comm is null, (You can use only nvl2 function for this and the function should return the final calculated salary i.e. sal+comm not just the commission).
4. Display the employee's name, salary, annual salary (salary * 12), commission percentage (commission / salary * 100), and half-year salary (annual salary / 2) and bonus (20% bonus for half year salary).
5. Display ename, job, sal, and hiredate of all employees using 'A' in Place of 'S' in all strings.
6. Get firstname of the student from the column std_name(PUCIT table) like if std_name "Laiba Riaz", output=Laiba.
7. Display ENAME, SAL, and STARS (derived column). The STARS column appends asterisk (*) at the right, with each asterisk signifying a 500 dollar. For example, 3 stars should output for all the employee with salary in the range 1500 to 1999.
8. List all employees who have hiredate after 1990 and their name is more than 5 characters long. You must have first 3 characters from employee name and join them last three characters of their job.
9. Find employees whose names contain exactly three 'A's and the third 'A' is at the end of the name. Also display they number of weeks from their hiredate until now.
10. Display all employees whose name start with a vowel and end whose job ends with a non vowel character and they number of months they being employeeed is even.

Task 03:**[5 Marks]****5 Marks Viva**