FACULTY OF COMPUTING & INFORMATION TECHNOLOGY

UNIVERSITY OF THE PUNJAB

<u>Database Systems: Assignment - 04</u>

BSIT FALL 2023   **Due Date:** 05-11-2024

Instructions
- Work on this Assignment individually.
- In case of any ambiguity, benefit will be given to the students.
- First read the query statement carefully before solving it.
- Plagiarism will not be tolerated and it will results in **ZERO**.
- You are supposed to do it on blank papers/ any register paper /any Sheets.
- Solve all the Queries.
- Assignment should be **HANDWRITTEN.**

You have to write all these Queries Total marks: 100

Assignment from Ch 1 , 2 , 3 , 4 , 5 , 6

For Example:

Query: Find All Rows from a Table name customers.
SQL : SELECT * FROM customers;

Query: Find All Rows from a Table named customer with city New York.
SQL : SELECT * FROM customers
WHERE city = 'New York';

EMP **(EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, COMM, DEPTNO)**
DEPT **(DEPTNO, DNAME, LOC)**
SALGRADE **(GRADE, LOSAL, HISAL)**
Green are Table names and *Oranges* are Table attributes.(These table may not be in database).

Question 01: Find the names of employees who earn more than the lowest salary grade.

Question 02: Select the employees who have a manager with a job title of 'Manager'.

Question 03: Find the average salary of employees hired after the maximum hire date.

Question 04: Find the List of departments with more than 5 employees. (department having more than 5 employees)

Question 05: List the employees who work in departments with managers who have a salary higher than $90,000

Question 06: Calculate the total number of employees in each job title.

Question 07: Find the difference between the highest and lowest salary in each department.

Question 08: Retrieve the names of employees along with the names of their managers' managers who work in departments located in 'California'.

Question 09: Find the employee names and their managers' names who work in the same department and have the same job title.

Question 10: Display the names and salaries of employees who earn the highest salary in their department.

Question 11: List the department names along with the average salary of employees in each department.

Question 12: Show the names of employees who earn the same salary as their manager

Question 13: List the names and hire dates of employees who were hired after the average hire date.

Question 14: Display the names and salaries of employees who earn less than the lowest salary in their department.

Question 15: Show the names and salaries of employees who earn more than the average salary of their department.

Question 16: Display the department names along with the number of employees earning a commission.

Question 17: Show the names and salaries of employees who earn less than the highest salary in their department.

Question 18: Display the department names along with the total number of employees hired in the year 2024.

Question 19: List the names and salaries of employees who earn less than the average salary but have a commission rate greater than 0.

Question 20: List the department names along with the total number of employees whose salaries are within the range of 2000 and 3000.

Question 21: Show the department names along with the total number of employees who have 'CLERK' in their job title.

Question 22: Display the names and salaries of employees who earn less than the highest salary in their department but have a commission rate greater than the average commission rate of all employees.

Question 23: List the names and salaries of employees who earn less than the average salary but were hired before the average hire date.

Question 24: Show the department names along with the total number of employees who earn more than the average salary of all departments.

Question 25: Show the names and salaries of employees who earn more than the average salary of their department but less than the average salary of all employees.

Question 26: Write a query that displays hire date, commission, department name and its location with their salary and grade.

Question 27: List employees who have not received a commission and have a manager.

Question 28: Identify the lowest-paid employee in each department and display their names, job titles, and salaries.

Question 29: Write a query that displays the sum and average salary of department 10.

Question 30: Calculate the remainder of a salary 'Remainder' after it is divided by 300 for all employees whose job title is MANAGER.

BEST OF LUCK