

FACULTY OF COMPUTING & INFORMATION TECHNOLOGY

UNIVERSITY OF THE PUNJAB



Database Systems: Assignment - 04

BS-DS(Morning/Afternoon) Fall 22

Due Date: 18-03-2024

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 result 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';`

==> For Question 1 to 24 & 26 to 30 use these tables:

Table==> EMP (EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, COMM, DEPTNO)

Table==> DEPT (DEPTNO, DEPTNAME, LOC)

Table==> SALGRADE (GRADE, HISAL, LOSAL)

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

Question 02: List the employees who have a salary higher than the average salary of employees in the 'IT' department.

Question 03: Select the employees who have a manager with a job title of 'Manager'.

Question 04: Find the average salary of employees hired after the maximum hire date.

Question 05: Find the List of departments with more than 5 employees. (department having more than 5 employees)

Question 06: Calculate the total number of employees in each department located in 'Texas'.

Question 07: Find the departments with no employees hired after 2018.

Question 08: List the employees who work in departments with managers who have a salary higher than \$90,000

Question 09: Find the difference between the highest and lowest salary in each department.

Question 10: Calculate the total number of employees in each job title.

Question 11: Determine the average years of service for employees in each department.

Question 12: Find the total salary expenditure for each location.

Question 13: Find the departments with no managers assigned.

Question 14: Retrieve the details of employees along with their department names and locations, but only for departments with more than 10 employees.

Question 15: List the employees who work in the same department as their manager and have a higher salary than their manager.

Question 16: Select the employees who have not been assigned to any department and have a hire date after 2020.

Question 17: Retrieve the names of employees along with the names of their managers' managers who work in departments located in 'California'.

Question 18: Find the employee names and their managers' names who work in the same department and have the same job title.

Question 19: Determine the departments where the average salary is higher than the overall company average salary.

Question 20: Find the average years of service for employees in departments with more than 50 employees.

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