S.No.	Experimental Description	Experiment Date	Submission Date
1	**Lab1 and Lab2** **SQL query based on Restricting and Sorting Data** **1.** Write a query in SQL to display the full name (first and last name), and salary for those employees who earn below 6000. **2.** Write a query in SQL to display the first and last_name, department number and salary for those employees who earn more than 8000. **3.** Write a query in SQL to display the first and last name, and department number for all employees whose last name is "McEwen". **4.** Write a query in SQL to display all the information for all employees without any department number. **5.** Write a query in SQL to display all the information about the department Marketing. **6.** Write a query in SQL to display the full name (first and last), hire date, salary, and department number for those employees whose first name does not containing the letter M and make the result set in ascending order by department number. **7.** Write a query in SQL to display all the information of employees whose salary is in the range of 8000 and 12000 and commission is not null or department number is except the number 40, 120 and 70 and they have been hired before June 5th, 1987. **8.** Write a query in SQL to display the full name (first and last name), and salary for all employees who does not earn any commission. **9.** Write a query in SQL to display the full name (first and last), the phone number and email separated by hyphen, and salary, for those employees whose salary is within the range of 9000 and 17000. The column headings assign with Full_Name, Contact_Details and Remuneration respectively. **10.** Write a query in SQL to display the first and last name, and salary for those employees whose first name is ending with the letter m.	13-3-2024 and 15-03-2024	20-03-2024

2	**Lab3** **SQL query based on Aggregated Functions** 1. Display average salary of employees in each department who have commission percentage. 2. Display job title and average salary of employees 3. Display details of jobs where the minimum salary is greater than 10000. 4. Display how many employees joined in each month of the current year. 5. Display number of employees joined after 15th of the month.	20-03-2024	22-03-2024
3	**Lab4** **SQL query based on Group by clause** 1.Display job ID of jobs that were done by more than 3 employees for more than 100 days. 2.Display departments in which more than five employees have commission percentage. 3.Display job ID, number of employees, sum of salary, and difference between highest salary and lowest salary of the employees of the job. 4.Display the details of departments in which the max salary is greater than 10000 for employees who did a job in the past. 5.Display details of manager who manages more than 5 employees.	22-03-2024	27-03-2024
4	**Lab5** **SQL query based on Joins I** 1. Write a query in SQL to display the first name, last name, department number, and department name for each employee. 2. Write a query in SQL to display the first and last name, department, city, and state province for each employee. 3. Write a query in SQL to display the first name, last name, salary, and job grade for all employees. 4. Write a query in SQL to display the first name, last name, department number and department name, for all employees for departments 80 or 40. 5. Write a query in SQL to display those employees who contain a letter z to their first name and also display their last name, department, city, and state province.	27-03-2024	29-03-2024

5	**Lab6** **SQL query based on Joins II** 1. Write a query in SQL to display all departments including those where does not have any employee. 2. Write a query in SQL to display the first and last name and salary for those employees who earn less than the employee earn whose number is 182. 3. Write a query in SQL to display the first name of all employees including the first name of their manager. 4. Write a query in SQL to display the department name, city, and state province for each department 5. Write a query in SQL to display the first name, last name, department number and name, for all employees who have or have not any department.	29-03-2024	3-4--2024
6	**Lab7** **SQL query based on Subqueries** 1. Write a query to display the name (first name and last name) for those employees who gets more salary than the employee whose ID is 163. 2. Write a query to display the name (first name and last name), salary, department id, job id for those employees who works in the same designation as the employee works whose id is 169. 3. Write a query to display the name (first name and last name), salary, department id for those employees who earn such amount of salary which is the smallest salary of any of the departments. 4. Write a query to display the employee id, employee name (first name and last name) for all employees who earn more than the average salary. 5. Write a query to display the employee's name (first name and last name), employee id and salary of all employees who report to Payam. 6. Write a query to display the department number, name (first name and last name), job and department name for all employees in the Finance department. 7. Write a query to display all the information of an employee whose salary and reporting person id is 3000 and 121 respectively.	3-4--2024	10-4--2024

	8. Display all the information of an employee whose id is any of the number 134, 159 and 183. 9. Write a query to display all the information of the employees whose salary is within the range 1000 and 3000. 10. Write a query to display all the information of the employees whose salary is within the range of smallest salary and 2500.		
7	**Lab8** **SQL query based on DML** 1. Change salary of employee 115 to 8000 if the existing salary is less than 6000. 2. Change job ID of employee 110 to IT_PROG if the employee belongs to department 10 and the existing job ID does not start with IT. 3. Insert a row into departments table with manager ID 120 and location ID in any location ID for city Tokyo. 4. Insert a new employee into employees with all the required details. 5. Delete department 20.	10-4--2024	12-4--2024
8	**Lab9** **SQL query based on DDL Part 1** 1. Write a query to create a table emp with empno, ename, designation, and salary. 2. Write a query for create a from an existing table with all the fields 3. Write a query for create a from an existing table with selected fields 4. Write a query for create a new table from an existing table without any record 5. Write a Query to Alter the column EMPNO.	12-4--2024	19-4--2024
9	**Lab10** **SQL query based on DDL Part 2** 1. Write a Query to Alter the table employee with multiple columns (EMPNO, ENAME.)	19-4--2024	22/05/2024

	2. Write a query to add a new column in to employee 3. Write a query to add multiple columns in to employee 4. Write a query to drop a column from an existing table employee 5. Write a query to rename table emp to employee		
	Lab11 **Project:** Consider the following set of requirements for a UNIVERSITY database that is used to keep track of students' transcripts. **Description** a) The university keeps track of each student's name, student number, Social Security number, current address and phone number, permanent address and phone number, birth date, sex, class (freshman, sophomore, ..., graduate), major department, minor department (if any), and degree program (B.A., B.S., ..., Ph.D.). Some user applications need to refer to the city, state, and ZIP Code of the student's permanent address and to the student's last name. Both Social Security number and student number have unique values for each student. b) Each department is described by a name, department code, office number, office phone number, and college. Both name and code have unique values for each department. c) Each course has a course name, description, course number, number of semester hours, level, and offering department. The value of the course number is unique for each course. d) Each section has an instructor, semester, year, course, and section number. The section number distinguishes sections of the same course that are taught during the same semester/year; its values are 1, 2, 3, ..., up to the number of sections taught during each semester. e) A grade report has a student, section, letter grade, and numeric grade (0, 1, 2, 3,or 4). 1- Draw an ER diagram for the schema(**Make sure to use correct notation for specifying cardinality ratios, total/partial participations, key constraints.**)	22/05/2024	29/05/2024

	2- Design the relational schema for this application. 3-Create tables in SQL for all the relations along with constraints.		