

Advanced database management system

Practical 1

Objectives of the Lab Assignment:

Familiarize with syntax and structure of SQL queries.

Test and execute the queries syntax and logical errors.

AIM: Perform the following tasks using MYSQL. Prepare the database according to the query given in the task.

Problem Statement:

Task-1:

Create a Database for an Organization and create the following tables in the Organization Database:

Employee(EMP_ID(PK),FIRST_NAME, LAST_NAME, SALARY, JOINING_DATE, DEPARTMENT)

Bonus(EMP_REF_ID(FK is EMP_ID), BONUS_AMOUNT, BONUS_DATE)

Title (EMP_REF_ID(FKEMP_ID), EMP_TITLE, AFFECTED_FROM) Insert a minimum of 50 records in each table.

Task-2:

Retrieve the following information from the Organization database:

1. SQL query to fetch "FIRST_NAME" from Employee table using the alias name as <Employee_NAME>.
2. SQL query to fetch "FIRST_NAME" from Employee table in upper case.
3. SQL query to fetch unique values of DEPARTMENT from Employee table.
4. SQL query to print the first three characters of FIRST_NAME from Employee table.
5. SQL query to print all Employee details from the Employee table order by FIRST_NAME Ascending and DEPARTMENT Descending.

6. SQL query to fetch the count of employees working in the department 'Admin'.
7. SQL query to fetch Employee names with salaries ≥ 50000 and ≤ 100000 .
8. SQL query to print details of the Workers who are also Managers.
9. SQL query to fetch duplicate records having matching data in some fields of a table.
10. SQL query to show only odd rows from a table.

Task-3:

Retrieve the following information using SQL commands from the Organization database:

1. SQL query to show only even rows from a table.
SQL query to show records from one table that another table does not have.
3. SQL query to show the top n (say 10) records of a table.
4. SQL query to fetch the first 50% records from a table.
5. SQL query to show all departments along with the number of people in there.
6. SQL query to show the last record from a table.