

Python-Sql Assignment

Perform all the operations using Python scripts

Q1) Load the table employees.csv into the 'employees', 'location' and 'department' table.

You can take help from the first answer in the following post:

<https://stackoverflow.com/questions/19205033/automatically-load-sql-table-by-reading-data-from-text-file>

Check for which attributes you need to provide the constraints like primary keys, NULL/NOT NULL values.

Try to provide user input for the queries wherever possible with proper print statements. Use SQL exception handling wherever possible.

Q2) Write a query to display the names (first_name, last_name) using alias name "First Name", "Last Name"

Q3) Write a query to get unique department ID from employee table

Q4) Write a query to get all employee details from the employee table order by first name, descending

Q5) Write a query to get the names (first_name, last_name), salary, PF of all the employees (PF is calculated as 12% of salary)

Q6) Write a query to get the employee ID, names (first_name, last_name), salary in ascending order of salary.

Q7) Write a query to get the total salaries payable to employees

Q8) Write a query to get the maximum and minimum salary from employees table

Q9) Write a query to get the average salary and number of employees in the employees table

Q10) Write a query to get the number of employees working with the company.

Q11) Write a query to get the number of jobs available in the employees table

Q12) Write a query to get the first 3 characters of first name from employees table

Q13) Write a query to display the names (first_name, last_name) and salary for all employees whose salary is not in the range \$10,000 through \$15,000

Q14) Write a query to display the names (first_name, last_name) and salary for all employees whose salary is not in the range \$10,000 through \$15,000 and are in department 30 or 100

Q15) Write a query to display the first_name of all employees who have both an "b" and "c" in their first name

Q16) Write a query to display the last name, job, and salary for all employees whose job is that of a Programmer or a Shipping Clerk, and whose salary is not equal to \$4,500, \$10,000, or \$15,000.

Q17) Write a query to display the last names of employees having 'e' as the third character

Use Aggregate Functions and Group by for the following:

Q18) Write a query to list the number of jobs available in the employees table

Q19) Write a query to get the minimum salary from employees table

Q20) Write a query to get the average salary for all departments employing more than 10 employees

Q21) Write a query to get the job ID and maximum salary of the employees where maximum salary is greater than or equal to \$4000

Use JOIN for the following

Q22) Write a query to find the addresses (location_id, street_address, city, state_province, country_name) of all the departments.

Hint: Use NATURAL JOIN

Q23) Write a query to find the names (first_name, last_name), department ID and the name of all the employees.

Q24) Write a query to find the employee id, name (last_name) along with their manager_id, manager name (last_name).

Q25) Write a query to display the department name, manager name, and city.