

January 2025 CSE 216

Online 1: Basic SQL (C1+C2)

Time: 45 min + Submission: 5 min

Total Mark: 5 * 5 = 25

1. For each country, show country_id, number of cities and number of provinces. Sort the output in ascending order of country_id. Discard those countries which have no provinces and less than two cities.
2. Display department IDs in which at most 1 employee had worked for at most 600 days.
3. Show the department_id, minimum hire_date, maximum hire_date, and average salary of all departments. Sort the list in ascending order of the difference between maximum and minimum hire_date of each department and then sort by average salary in descending order. Make sure no null values are printed.
4. For each employee, display their full name (full name includes first name, a space and last name), current annual salary, current monthly salary, commission percentage, and their next year's increased monthly salary. Consider that employees will get a year-end increment according to the formula (increment = annual salary * commission percentage / 100). Employees who do not have any defined commission percentage will get a 0.05% pay deduction (based on their annual salary) at the end of the year.
5. For each manager, show the manager id, number of employees under his management who joined in March, September or December and average salary of those employees. Show the outputs where the average salary is integer. Print the output in the ascending order of number of employees managed and if there is a tie then print those in descending order of average salary. Make sure any sort of null value is not printed.