-- 1) SCENARIO - The company is in urgent need for workforce management which means they need to reduce the number of employees for cost cutting due to the recent crises they have been facing.

-- One way to do this is to do analysis on the highly paid employees such that if their work is not satisfactory they can be terminated which will help largely in the cost cutting process.

-- Terminating low salaried employees will not help the company much.

-- Task: Find the top 10 employees (names) having the highest salaries.

-- Hint: Join the tables of employees and salary.

Query:

SELECT

e.first\_name, e.last\_name, s.salary

FROM

employees AS e

JOIN

newsalaries AS s ON e.emp\_no = s.emp\_no

ORDER BY s.salary DESC

LIMIT 10;

Output:

-- Tokuyasu Pesch 158220.0

-- Honesty Mukaidono 156286.0

-- Xiahua Whitcomb 155709.0

-- Sanjai Luders 155513.0

-- Tsutomu Alameldin 155190.0

-- Willard Baca 154459.0

-- Lidong Meriste 154376.0

-- Charmane Griswold 153715.0

-- Weijing Chenoweth 152710.0

-- Weicheng Hatcliff 152687.0

-- 2) SCENARIO - 2

-- Analysing the departments of high salaried employees and the salaries from such departments is as important as the first task of salary analysis.

-- The company has a requirement of finding the departments in which high salaried positions exist.

-- This analysis will help the company to reduce the workforce specifically of such departments which will tremendously help in the cost cutting process of the company.

-- Task: Find the department names of the top 10 employees having the highest salaries.

-- Hint: Join the required tables and sort the values

SELECT

d.dept\_name, e.first\_name, e.last\_name, s.salary

FROM

employees e

INNER JOIN

newsalaries s ON e.emp\_no = s.emp\_no

INNER JOIN

new\_dept\_emp de ON e.emp\_no = de.emp\_no

INNER JOIN

departments d ON de.dept\_no = d.dept\_no

ORDER BY s.salary DESC

LIMIT 10;

-- Production Tokuyasu Pesch 158220.0

-- Development Honesty Mukaidono 156286.0

-- Development Xiahua Whitcomb 155709.0

-- Customer Service Sanjai Luders 155513.0

-- Sales Tsutomu Alameldin 155190.0

-- Quality Management Willard Baca 154459.0

-- Production Lidong Meriste 154376.0

-- Research Charmane Griswold 153715.0

-- Production Weijing Chenoweth 152710.0

-- Customer Service Weicheng Hatcliff 152687.0

-- so production been the highest department

-- 3) SCENARIO - 3

-- Similar to the previous scenario, not just the high salaried departments need to be focused on but also high employed departments analysis can help the company to do workforce management.

-- The company has decided a threshold of the number of employees for each department and to take an action on the departments with the number of employees more than the threshold they first need to find the highly employed departments.

-- Task: Find the top 3 departments having the highest number of employees.

-- Hint: Use group by and order by clauses

SELECT

d.dept\_name, COUNT(\*) AS num\_employees

FROM

employees AS e

JOIN

new\_dept\_emp AS de ON e.emp\_no = de.emp\_no

JOIN

departments AS d ON de.dept\_no = d.dept\_no

GROUP BY dept\_name

ORDER BY num\_employees DESC

LIMIT 3

-- Development 76967

-- Production 66672

-- Sales 46921

-- this are 3 departments having highest number of employees

-- 4) SCENARIO - 4

-- From the observations and analysis of the excel dataset we can say that the major focus of the company is to reduce the workforce of the sales department. As the number of sales are affected majorly the company finds the need to urgently reduce the workforce of sales departments.

-- This issue can be solved by focusing on those sales employees whose salary is greater than the average salary of the sales department.

-- Task: Find the list of employees from the sales department having a salary more than the average sales department salary.

-- Hint: Use where clause and subquery

select e.first\_name, e.last\_name, s.salary

from employees e

join newsalaries s ON e.emp\_no = s.emp\_no

join (

select dept\_no, avg(salary) as avg\_salary

from newsalaries

join new\_dept\_emp on newsalaries.emp\_no = new\_dept\_emp.emp\_no

group by dept\_no

)

dept\_salary on e.emp\_no = s.emp\_no

join departments d on dept\_salary.dept\_no = d.dept\_no

where d.dept\_name = 'Sales' and s.salary > dept\_salary.avg\_salary

order by s.salary desc

limit 15;

-- Tokuyasu Pesch 158220.0

-- Honesty Mukaidono 156286.0

-- Xiahua Whitcomb 155709.0

-- Sanjai Luders 155513.0

-- Tsutomu Alameldin 155190.0

-- Willard Baca 154459.0

-- Lidong Meriste 154376.0

-- Charmane Griswold 153715.0

-- Weijing Chenoweth 152710.0

-- Weicheng Hatcliff 152687.0

-- Shin Birdsall 152412.0

-- Mitsuyuki Stanfel 152220.0

-- Mohammed Moehrke 150740.0

-- Ibibia Junet 150345.0

-- Lansing Kambil 150052.0

-- 5) SCENARIO - 5

-- According to the current situation of the company, they have decided the threshold/ margin of 65,000 monthly average salary of the departments which will help them in cost cutting as well as in workforce management.

-- How can we find the designations or job titles which are having high salaries?

-- If this question is resolved the company can focus on such designations or job titles and will stop their new hiring as well as can focus on the retrenchment of the employees having these designations for cost cutting purposes.

-- Task: Find the titles having an average salary greater than 65,000.

-- Hint: Use group by and having clauses.

SELECT

nt.title, AVG(ns.salary) AS avg\_sal

FROM

employees AS e

JOIN

newsalaries AS ns ON e.emp\_no = ns.emp\_no

JOIN

newtitle AS nt ON e.emp\_no = nt.emp\_no

GROUP BY nt.title

HAVING AVG(ns.salary) > 65000

ORDER BY avg\_sal DESC

Senior Staff 79656.84339

Senior Engineer 69610.12391

Staff 69337.17417

Manager 68514.33333

Technique Leader 65490.77186