**IST471**

**Classroom Assignment 5 (15 points)**

**Theme: Query Analysis**

**Analyze the following query:**

SELECT monthly\_salary monthly\_salary\_mode

FROM (SELECT monthly\_salary, COUNT(monthly\_salary) AS cnt1 FROM emp GROUP BY monthly\_salary)

WHERE cnt1 =

(SELECT MAX(cnt2) FROM (SELECT COUNT(monthly\_salary) AS cnt2 FROM emp GROUP BY monthly\_salary) )

ORDER BY 1;

**Questions:**

**What is primary function of the query above?**

* **To show which salaries belong to multiple employees**

**What subqueries are inserted in the query?**

* SELECT monthly\_salary, COUNT(monthly\_salary) AS cnt1 FROM emp GROUP BY monthly\_salary
* SELECT MAX(cnt2) FROM (SELECT COUNT(monthly\_salary) AS cnt2 FROM emp GROUP BY monthly\_salary)
* SELECT COUNT(monthly\_salary) AS cnt2 FROM emp GROUP BY monthly\_salary

**Does any multiple-level subquery exist in the query?**

* SELECT MAX(cnt2) FROM (SELECT COUNT(monthly\_salary) AS cnt2 FROM emp GROUP BY monthly\_salary)

**Analyze and explain the purpose/function of each subquery.**

* SELECT monthly\_salary, COUNT(monthly\_salary) AS cnt1 FROM emp GROUP BY monthly\_salary
  + **This subquery counts how many employees have the same salary.**
* SELECT MAX(cnt2) FROM (SELECT COUNT(monthly\_salary) AS cnt2 FROM emp GROUP BY monthly\_salary)
  + **This subquery finds out what the max number of employees with the same salary is.**
* SELECT COUNT(monthly\_salary) AS cnt2 FROM emp GROUP BY monthly\_salary
  + This subquery shows the number of employees with the same salary however this query alone does not list the salaries.