

## 22/9/20 Task 4:- Developing queries processing with DML multi row functions and operators.

perform the advanced query processing (multi row abilities) and test its heuristics using the designing of optimal correlated and nested subqueries such as finding summary statistics.

Consider the schema for

EMPLOYEES (emp-no emp-name, Department, Dept-No, salary, Age)

orders (emp-no, order id, price, qty-ord, qty-hand)

itemfile (itemid, itemname, qty-ord, qty-hand-item rate)

Queries using union, Intersect, Minus

union:- The union operator returns all distinct rows selected by two (or) more queries.

SQL > select emp-no from employees;

Output

Practice Questions:-

- 1) Find the emp-no of employees whose name starts with 'S' and ends with 'M'.
- 2) Find the names of the employees whose age is between 20 and 40.
- 3) Display all the names of the employees beginning with 'R'.
- 4) Display the sorted list of employees names.

Queries using Group By, Having clause and order clause

Group By:- This query is used to group to all the records in a relation together for each and every value of a specific key and then display them for a selected set of field the relation.

SQL > select deptno-count(\*) from employees group by deptno;

Group By Having:- The HAVING clause was added to SQL because the WHERE key word could not be used with aggregate functions. The HAVING clause must follow the Group By clause in a query and must precede the ORDER By clause if used.

SQL > select deptno-count(\*) from employees group by deptno having deptno is not null;

order By:- This query is used to display a select set of fields from a relation in an ordered manner based on storage field.

syntax:-

select <column(s)> from <Table Name> where  
[condition(s)] [order by <column Name> [asc]  
desc];

SQL > select empno, ename, salary from employees order by salary;

Output:-

SQL > select emp-no from orders,

output:-

SQL > select emp-no from employees () union select emp-no  
from orders.

output:-

union All:-

SQL > select emp-no from employees union all select emp-no  
from orders.

Intersect:-

SQL > select emp-no from employees intersect select  
emp-no from orders;

output:-

Minus:-

SQL > select emp-no from employees minus select emp-no  
from orders;

output:-

SQL > select salary + comm net-sal from emp-master;

output:-

SQL > select 12 (salary + comm) annual netsal from emp-master

output:-

SQL > select \* from employees

SQL > Insert into employees select from employee where emp-  
in (select emp-id from employees);



SQL Plus having following operators

SQL > select salary + column from emp-master, salary + comm

IN Query: select \* from Employees where department IN  
(select Department from employees where department = 'sales');

NOT IN Query: select \* from employees where Department NOT IN  
(sales, (Marketing));

ALL:

Query: select from employees where salary > ANY (select salary  
from Employees where Department = "sales");

ANY:

Query: select \* from employees where salary > ALL (select salary  
from employees where department = 'sales');

SQL > select \* from order-master where order-no < (select order-no  
from orders);

SQL > select \* from order-master where order-no = (select order-no  
from orders);

~~SQL~~  
INSERT INTO target-table (column 1, column 2, ---)  
select column 1, column 2, ---  
from source-table  
where condition;

Insert Into Alumni (stu-Id, Name, Graduation Year) select stu-Id,  
Name, passout-year from student  
where Passout-year < 2023;

Delete From Target Table  
where column\_name IN (select column are from source-table  
whose condition).

Delete the lowest paid employee

Delete From Employee

where salary = (

select MIN (salary)

from Employee

);

Delete all orders placed by customer in Chennai

output:-

Item name  
key board  
Laptop  
Mouse  
web cam

output:-

Item-name  
Key board  
Mouse

output:-

Item name  
Laptop

output:-

dept-name	no of emp	avg salary
		67500
sales	2	
	1	80000
HR		
	3	95000
engineering		

output:-

e-name	Salary
David	110000
Bob	90000
Frank	850000

output:-

e-name	salary
Alice	75000
charlie	60000
eve	80000

output:-

e-name	salary
Alice	75000
charlie	60000
eve	80000



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update Employee
SET Salary = salary + 5000
where Dept = ID
select Dept - ID
From Department
where Dept - Name = 'IT'
);

```

Increase salary of employees in IT department.

create a department summary table

create Table Dept - summary As

select Dept - ID, COUNT(\*) As Total Employees,

AVG(salary) As Avg - salary

From Employee

Group By Dept - ID;

selects only students who scored a A grade.

Result:- queries with DML functions and operators executed successfully

VEL TECH - CSE	
EX NO	4
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	4
TOTAL (20)	19
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