Task 4: Developing queries with DML Multi row Functions and operations.

Aim: To develop the queries with DML multi row functions and the operations.

Consider the schema for EMPLOYEES (emp_no, emp_name, Department, Dept_no, Salary, AGE)

Orders (emp_no, order_id, price, qty_ord, qty_hand)

Item file (itemid, itemname, qtyord, qty_hand_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:

SQL > Select empno from orders;

Union all:

SQL > Select emp_no from employees union all

Select emp_no From order;

Intersect:

SQL > Select emp no from employees intersect

Select emp_no from orders;

Minus:

SQL > Select emp_no from employees minus

Select emp_no from Orders;

Queries using group by, having clause and order clause.

Output

Item name

key board

laptop

Mouse

web cam

output

item_name

key board

Mouse

output

item_name

Laptop

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

SQL > Select deptno. Count() from employees group by depth o:

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 also precid the ORDER By clause if used

SQL > Select dept.no. Count() from employees group by ~~set of fields from a relation in an ordered manner~~ base dept no 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 base on same field:

Syntax:

Select < Column (1)> from < Table Name > where [Condition(s)] [ordered by < column Name > [asc] desc]

SQL> Select empno, ename, salary from employees ordered by salary;

output:

SQL plus having following operations.

SQL> Select salary + column from emp_master salary + Comma.

output

dept_name	no. of emp	avg salary
Sales	2	67500
HR	1	80000
Engineering	3	95000

output:

dept_name	no. of emp
Sales	2
Engineering	3

output

e_name	Salary
David	110000
Bob	90000
Frank	850000

SQL> Select Salary + Comm net_sal from emp_master;

Output:

SQL > select 12(Salary + comm) annual_netsal from emp_master.

Subqueries:

SQL > Select from employees

Sql > Insert into employees select from employees where emp_id in (Select emp_id from employees);

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

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 = any (select order_no from other_detail)

INSERT INTO Target_table (column1, column2, ...)

Select column1, column2, ...

From source_table

where condition;

INSERT INTO Alumni (stu_Id, Name, Graduation_year)

Output

ename	Salary
Alice	75000
Charlie	60000
Eve	80000

output

e_name	Salary
Alice	75000
Charlie	60000
eve	80000

Select stuId, Name, passout_year from student.
where passout_year < 2023;

Delete from Target_Table
where column_name IN (Select colu_name From source_table where condition);

Delete the lowest paid employee

Delete From Employee
where salary = (
Select MIN(Salary) FROM Employee);

Delete all orders placed by Customers in chennai.

Update Employee SET Salary = Salary + 5000 where Dept= ID = (select Dept_ID From Department where Dept_Name = 'IT');

Increases 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;

Select only students who scored a A grade.

VEL TECH - CSE	
EX NO.	6
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA [illegible] (5)	5
[illegible] (5)	5
TOTAL (20)	20
[illegible] WITH DATE	

Result:

Thus, the developing queries with DML Multi row [illegible] and operation is checked and the output is verified successfully.