

Task no: 31
Date: 19/8/25

DML Commands clauses, operators and functions in queries.

Aim:- To implement DML commands using clauses, operators and functions in queries.

Data Manipulation Language (DML)

1. Insert into:- This is used to add records into relation.

Syntax:- INSERT INTO <table name>
(col1, col2, ...) values (val1, val2, ...);

ex:-

SQL > insert into customer values

(1, 'John Deo', '123-456-789',

'New York', 100.00);

SQL > insert into customer value

(2, 'Smith', '1987-654-321',

'Chicago', 200.00);

SQL > insert into customer value 3;

(3, 'Smith', '1555-123-456', 'America', 50.00);

After inserting?

| Cust ID | Cust-Name | phone-no | City | Amount paid |
|---------|-----------|-------------|----------|-------------|
| 1 | John Doe | 123-456-789 | New York | 100.00 |
| 2 | Smith | 987-654-321 | Chicago | 200.00 |
| 3 | Krish | 555-123-456 | America | 50.00 |

2. update - set - where

This is used to update the constant of record in a relation.

Syntax:- $\text{update, table-name}$
 $\text{SET Column} = \text{value}$
 $\text{WHERE Condition};$

Example:- $\text{SQL} \rightarrow \text{update Customer}$

$\text{SET Cust-phone NO} = '888\ 786\ 7786'$
 $\text{WHERE Cust-ID} = 1;$

After updating:-

| Cust-ID | Cust-Name | Phone-NO | City | Amount paid. |
|---------|-----------|--------------|----------|--------------|
| 1 | John Doe | 888 786 7786 | New York | 100.00 |
| 2 | Smith | 987 654 321 | Chicago | 200.00 |
| 3 | Krish | 555 123 456 | America | 50.00 |

3. Delete From:

This is used to delete all the records of a relation but it will retain the structure of that relation.

(a) Delete From:- This is used to delete all the records of relation.

Syntax:- SQL > Delete from table_name;

Example:- SQL > Delete from customer;

After deleting

| Cust-ID | Cust-name | Phone-no | City | Amount paid. |
|---------|-----------|----------|------|--------------|
| | | | | |

b) DELETE - FROM - WHERE

This is used to delete a record's select of relation.

Syntax:- SQL > Delete from relation_name
where condition;

Ex:- SQL > Delete from customer
where Cust-ID=2;

After deleting:-

| Cust-ID | Cust-name | Phone-no | City | Amount paid. |
|---------|-----------|--------------|----------|--------------|
| 1 | John Doe | 888 785 2786 | New York | 100.00 |
| 3 | Erin | 555 123 456 | America | 50.00 |

5) Truncate:

This commands will remove the data permanently But structure will not be removed.

Syntax:- Truncate Table & Table-Names

Ex:- Truncate table Customer;

| Cust-ID | Cust-Name | phone-no | City | Amount paid |
|---------|-----------|----------|------|-------------|
| | | | | |

Distinct:

Query:- Select Distinct 'Cust-city'
From Customer;

Output:-
Cust - City
New York
Chicago
America.

Union:-

Query:- Select . Cust-Name . As name
From Customer . union select
mobile - name As name from
mobile ;

Output:-

Name

John

Alice

Ravi

Meena.

| VEL TECH | |
|-------------------------|---------|
| EX NO. | 3.1 |
| PERFORMANCE (5) | 5 |
| RESULT AND ANALYSIS (5) | 5 |
| VIVA VOCE (5) | 5 |
| RECORD (5) | 1 |
| TOTAL (20) | 15 |
| DATE WITH DATE | 12/8/22 |

Result:- Thus, implementation of SQL commands using * clauses operators and function in queries executed successfully.

Roll: 82.

Date: 26/8/25 - Aggregate Functions

Aim:- To study and implement aggregate functions (count(), sum(), Avg(), min(), max()) on a sample ~~sheet~~ mobile phone database.

Procedure

1. Create a table named mobile.phone
2. Insert sample records
3. Write queries using aggregate functions.
4. Observe and record the output.

Commands with explanation.

1. Count the total number of ~~students~~ ^{mobile phones}

Select count* as total - Mobile phones
FROM mobile phones;

output:- ~~total - mobile phones~~ = 5

2. Find the highest ~~marks~~ ^{purchases} obtained by a mobile phone.

Select max(purchases) as Highest
FROM mobile phones.

Output:- Highest - purchase = 30,000.

3. Find the average purchases of mobiles.

Select Avg (amount) As Average-amount
from mobile phone;

output:- Average-amount = 15000.

4. Find the minimum purchases among
Mobiles in the Brand.

~~SELECT MIN (purchases) AS Min = Brand~~
purchases.

from Mobile phones.

WHERE Brand = 'Realme';

5. Find the total ^{amount} ~~purchases~~ in the
Mobile phone in each category.

Query:- ~~SELECT~~ Category^{brand}, Sum (amount)
AS total-amounts.

from ~~students~~ Mobile phone

Group by Category.Brands;

Output 2

Category brand - total = amount

Realme 30,000

Redmi 150,000

vivo 25,000

6) Find the average amount per Category brand ordered by average amount descending.

Query: Select Category brand, avg (amount) as avg-amount from mobile phone - group by Category brand order by avg-amount descending

Output:- Category brand - avg-amount

| | | | |
|-------------------------|---------|--------|---------|
| VEL TECH | | VIVO | 25,000 |
| EX NO. | 32 | Redmi | 150,000 |
| PERFORMANCE (5) | 5 | Realme | 30,000 |
| RESULT AND ANALYSIS (5) | 5 | | |
| VIVA VOCE (5) | 5 | | |
| RECORD (5) | 5 | | |
| TOTAL (20) | 15 | | |
| SIGN WITH DATE | 26/8/20 | | |

Result:- The implementation of aggregate function executed successfully.