

Task-3.1

DML commands using clauses operators
Date: 19/08/25 and functions in queries

Aim: The impact DML commands using clauses operators and functions in queries.

Data Manipulation Language

The DML is used to retrieve insert and modify database information. These commands will be used by all database user during the routine operation of the database.

DML Commands

• Insert into: This is used to add records into relation values (val 1, val 2...);

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

Ex:

SQL insert into customer values (1 John Doe
123-456-789 'New York' 100.00);

SQL insert into customer values (2 Smith, 987-
654-321, 'Chicago', 200.00);

SQL insert into customer values (3, Krish, 555-
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 content of a record in a relation

Syntax: SQL > update table-name

SET column = value

WHERE condition;

Example:

SQL > update customer

SET cust-PhoneNo = '9998887776'

SET cust-Pho WHERE cust-ID = 1

After updating

| cust-ID | cust-Name | Phone-No | city | Amount-Paid |
|---------|-----------|-------------|----------|-------------|
| 1. | John Doe | 9998887776 | New York | 100.00 |
| 2. | Smith | 987654321 | chicago | 200.00 |
| 3. | Krush | 555 123 456 | America | 50.00 |

3. Delete form:

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

a) Delete - form: 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 records select of relation
Syntax: SQL > Delete from relation-name where condition
Example: SQL > Delete from customer
 WHERE cust-ID = 2;

After Deleting

| cust-ID | cust-Name | Phone-No | city | Amount Paid |
|---------|-----------|--------------|----------|-------------|
| 1 | John Doe | 999 888 7776 | New York | 10000 |
| 3 | Koush | 555 123 456 | America | 8000 |

5. Truncate

This command will removed the data permanently
 But structure will not be removed.

Syntax: Truncate Table <Table Name>

Example: 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 customers
union select mobile - Name As Name from

output

Name
John
Alia
Ravi
Meena.

| VEL TECH | |
|-------------------------|------|
| EX NO. | 21 |
| PERFORMANCE (5) | 5 |
| RESULT AND ANALYSIS (5) | 5 |
| VIVA VOCE (5) | 4 |
| RECORD (5) | |
| TOTAL (20) | 14 |
| SIGN WITH DATE | 10/9 |

Result: The implementation of DML commands using clauses operator and functions in queries executed successfully

Aggregate Function

Aim To study and implement aggregate function `count()`, `sum()`, `Arg()`, `Min()`, `max()` on a sample mobile phone database.

Procedure:

1. create a table name mobile Phone
2. Insert sample records.
3. write queries using aggregate function
4. observe and record output commands with explanation

1) Count the total number of mobile Phones

`SELECT count (*) AS Total mobile Phones from mobile Phone;`

output: Total - mobile Phones : 3

2. Find the highest 'Purchase' obtained by a mobile Phone

`SELECT Max (Purchase) AS highest - Purchase FROM mobile Phone;`

output: Highest : Purchase ; 30000

3. Find the average amount of mobile Phone

`SELECT Avg (Amount) AS average - amount From mobile Phone;`

output: Average - amount : 15000

4. Find minimum Purchase amount mobile Phone in the brand.

SELECT MIN (PURCHASE) AS MIN-Brand Purchase
from mobile Phone
WHERE mobile Phone = Redmi

5) Find the total amount in the mobile Phone in each category Brand.

SELECT Brand sum (amount) as total amount
from Purchase mobile Phone group by Brand
output:

| Brand | Total amount |
|-------|--------------|
| Redme | 30,000 |
| Redmi | 15,000 |
| vivo | 25,000 |

6 find the average amount brand ordered by average descending

SELECT Brand avg (amount) as Avg-amount
from mobile Phone group by brands ordered
avg
amobile design.
output:

| VEL TECH | |
|----------|-------------|
| Brand | avg. amount |
| vivo | 25,000 |
| Redmi | 15,000 |
| Redme | 30,000 |

| EXNO. | |
|-------------------------|-----|
| PERFORMANCE (5) | 5.2 |
| RESULT AND ANALYSIS (5) | 5 |
| VIVA VOCE (5) | 5 |
| RECORD (5) | 3 |
| TOTAL (20) | 13 |
| SIGN WITH DATE | |

Result: Thus the implementation of aggregate functions executed successfully.

10/9