

Aim: To implement 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 users during the routine operation of the database.

### DML commands:

Insert into: This is used to add records into relation

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

### Example:

SQL insert into patient 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 value 3, 'Wish', '555-123-456',  
'America', 80.00);

Pat-ID	Pat.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	Wish	555-123-456	America	80.00

## 2 UPDATE - SET - WHERE

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

Syntax: SQL > UPDATE table-name

SET column = Value

WHERE condition;

Example

SQL > UPDATE customers

SET Pat-Phone No = '9998887776'

WHERE Pat-ID = 1;

After updating.

Pat-ID	Pat-Name	Phone No	City	Amount-Paid
1	John Doe	9998887776	New York	100.00
2	Smith	987654321	Chicago	200.00
3	Krish	555123456	America	80.00

## 3. Delete & Drop:

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

a) Delete & Drop: This is used to delete all the records of relation.

Syntax: SQL > Delete from table-name;

Example: SQL > Delete from Patient;

After deleting

Pat-ID	Pat-name	Phone-no	city	amount-paid

b) Delete - From - where: This is used to delete a records select of relation

Syntax: SQL > Delete from relation-name where condition;

Example: SQL > Delete from patient  
where Pat-ID = 2;

after Deleting:

Pat-ID	Pat-Name	Phone-No	city	Amount-Paid
1	John Doe	9998887776	New York	100.00
3	Wish	855123456	America	50.00

8. Truncate

This command will remove the data permanently but structure will not be removed

Syntax: Truncate Table < Table Name >

Example: Truncate Table customer;

Pat-ID	Pat-Name	Phone-No	city	amount-Paid

Distinct  
query: select distinct Pat-city  
 from patient;

out put      Pat-city  
 Newyork, chicago, America

union :  
query: select Pat-name as Name from patient  
 union select mobile-Name as Name from  
 mobile;

out put      Name  
 John  
 Alice  
 Ravi  
 Meena

VEL TECH	
EX No.	31
PERFORMANCE (S)	5
RESULT AND ANALYSIS (S)	5
VIVA VOCE (S)	3
RECORD (S)	-
TOTAL (20)	13
SIGN WITH DATE	15/8/17

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

26-8-28.

## Aggregate Functions

Aim: To ~~study~~ implement aggregate functions (count(), sum(), avg(), min(), max()) on a sample patient Data Base

### Procedure

1. Create a table named patient
2. Insert sample records
3. Write queries using aggregate functions
4. observe and record output

commands with explanation

1) count the total no of phone numbers

SELECT count(\*) AS Total patients from patients;

Output: Total - patients: 3.

2) find the highest appearance obtained by a patient

Select max(appearance) as highest-appearance  
From patient;

Output: Highest-appearance: 25.

3) find the average  $\text{se appearance}$  of Patients

SELECT AVG( $\text{se appearance}$ ) AS Average- $\text{se appearance}$   
from patients;

Output: Average amount: 15

4) Find minimum  $\text{se appearance}$  among Patients  
in the hospital

SELECT MIN( $\text{se appearance}$ ) AS min-patient  $\text{se appearance}$ ,  
from patients

where patient  $\text{se appearance} = 10$ ;

5) Find the total amount of Patients in each  
Department

Select Patient, sum(amount) as total-amount

Output:

patient	$\text{se appearance}$
John Doe	15
Smith	10
Wish	25

6) Find the average scapparens of a patients

Select Patient + scapparence as Avg. Patient  
exam patient

out put :

Patient	Avg scapparence
John Doe	15
Smith	10
Wright	25

VEL TECH	
EX No.	3.2
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	3
VIVA VOCE (5)	4
RECORD (5)	-
TOTAL (20)	14
SIGN WITH DATE	R 26/9/22

Result: Thus the implementation of Aggregate function executed successfully