

Task No: 3-1  
Date: 19/08/25

## DML commands using clauses, operators and functions in queries.

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

### Data manipulation language (DML):

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:

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

Syntax: insert into <table name> (field1, field2... field n)  
values (data-1, data-2 --- data-n);

Example: SQL > insert into customer values (238, 'Ram', 'Chennai', '986264090');

SQL > insert into customer values (409, 'Rocky', 'Vizag', '8441180892');

SQL > insert into customer values (112, 'Virat', 'Hyderabad', '704986929');

After inserting:-

Customer-ID	name	address	ph-no.
238	Ram	Chennai	986264090
409	Rocky	Vizag	844118092
112	Virat	Hyderabad	704986929

2. update - set - where,

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

Syntax: SQL > update relation name set field-name1 = data, field-name2 = data, where field-name = data;

Example: SQL > update customer set name = 'Kumar' where Customer-ID = 409.

customer ID	name	address	ph-no.
238	Ram	chennai	986264090
409	kumar	vizag	844118092
112	virat	Hydrabad	704986929.

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:

customer-ID	name	address	ph-no.

b) Delete-from-where: This is used to delete a selected record from a relation.

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

Example: `SQL > Delete from customer where name = 'Ram';`

After deleting.

Customer-ID	name	address	phno.
409	kumar	vizag	844118092
112	virat	Hydrabad	704986929.

### 5. Truncate

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



Syntax: Truncate table customers;

After truncate:

Customer-ID	Name	address	ph-no.

### Queries

1. Retrieve a member name starts with letter 'r'.

Query: select name from bank-account where name like 'r.%'

output: Name  
-----  
Vijay  
vikram  
virat.

2. List of Account where balance between 10000 and 20000;  
10000 and 20000.

output:

Name	Account-number	Balance	category.
Vijay	2345	10000	Savings
Vikram	7890	20000	Savings.

3. Finding records who has minimum Balance.

Query: select min(balance) from bank-account;

output: min(Balance)  
-----  
10000

4. Finding records who has Balance  $\geq 20000$ ,

Query: select \* from bank-account where balance  $\geq 20000$ ;

output:

Name	Account-number	Balance	category.
Vikram	7890	20000	Savings
Virat	4567	35000	Salary
Akash	8987	50000	RD.

5. Distinct

query select distinct category from Bank-account;

output Category  
-----  
savings  
salary  
RD.

6. union

query select name from customers union select name from bank-account

output Name  
Rocky  
virat  
Vijay  
Vikram  
Abash

VELTECH	
EX No.	3
PERFORMANCE (5)	5
RESULT AND ANALYSIS (3)	5
VIVA VOCE (3)	2
RECORD (4)	
(15)	12
TOTAL	20

219

Result The implementation of RML commands using clauses, operators and function in Queries executed successfully.



Task No: 8.2  
Date: 26/08/25

## Aggregate Functions

Aim To study and implement aggregate functions (count(), sum(), Avg(), min(), max());

### Procedure

1. create a table named bank - Account.
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.

select count(\*) As Total - amount from Bank - Account;

output Total - amount  
-----  
4

2. Find the highest amount in the account:

select max (balance) As highest - amount from Bank - Account;

output ~~Total - amount~~ Highest - amount  
-----  
50000

3. Find the average amount of Accounts;

select Avg (balance) As Average - amount from Bank - Account;

output Average - amount  
-----  
28750.

- 4) Find maximum Amount of the Account.

Query select min (balance) as min - amount from  
Bank - account;

output min - account  
-----  
10000

5) Find the total amount in the Bank Account in each category.

Query: select category, sum(balance) as total-amount from bank-account group by category;

output

<u>category</u>	<u>Total amount</u>
savings	30000
salary	35000
RD	50000

6) Find the average balance per category ordered by average balance descending.

Query: select category, avg(balance) as avg-balance from bank-account group by category order by avg-balance desc

output

<u>Category</u>	<u>Avg-balance</u>
RD	50000
Salary	35000
RD	15000

VELTECH	
EX No.	8.1
PERFORMANCE (5)	5
RESULT AND ANALYSIS (3)	5
MAVOCE (3)	4
... (4)	
... (5)	14
... (5)	

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Result: The implementation of aggregate functions executed successfully.