Task NO: 3.1 DML commands using clauses, operators, constraints and functions in queries

Date: 19-08-25

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:-

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

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

Example:- SQL> insert into customer values (238, 'Ram', 'chenna
'98626409');

SQL> insert into customer values (409, 'Rocky', 'vizag',
'844118092');

SQL> insert into customer values (112, 'virat', 'Hydera bad
'7049809299');

After Inserting;

Customer-ID	Name	address	Ph-no
288	Ram	Chennai	98626409D
409	Rocky	vizag	844118092
112	virat	hyderabad	7049869299

· 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-name 2 = data, where-field-name = data;

Example: SQL > update customer set name = 'kumar' where customer-ID = 409

After updating:-

customer-ID	name	address	Ph-no
238	Ram	chennai	9826404040
409	kumar	Vizag	8441180192
112	Virat	Hyderabad	7049 869291

· 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 relation.

Syntax: SQL > Delete from table-name;

Example: SQL > Delete from customer;

After deleting:

customer ID	name	address	ph-no

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

Syntax: SQL > Delete from relation-name where condi

ample: SQL > Delete from customer where name = 'Ram

After deleting

customer-ID	name	address	ph-no
409	kumar	vizag	8441180
112	virat	Hyderabad	7049869

5. Truncate

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

Syntax: Truncate Table < Table Names

Example: Truncate Table customer;

After truncate:

customer-ID	name	address	ph-no

Queries

1. Retrive a member name starts with letter 'v'.

Query: select name from bank_account where name like '%v%';

Output:-

Name

Vijay
vikram
virat.

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

Query select * from bank-account where balance between 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 >= 20000;

Query :- select * from bank-account where balance >=20

output :-

Name	Account-number	Balance	category
vikram	7890	20000	Savings
virat	4567	35000	Salary
akash	8987	50000	RD

5. Distinct

6. Query :- Select distinct category from Bank-acco

output :-

category
Savings
Salary
RD

6. union

Query :- select name from customer union select name from bank_account;

output :-

Name
Rocky
virat
vijay
vikram
akash

VEL TECH	
EX NO.	3
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	4
RECORD (5)	
TOTAL (20)	14
SIGN WITH DATE	

VEL TECH
EX NO.
PERFORMANCE (5)
RESULT AND ANALYSIS (5)
VIVA VOCE (5)
RECORD (5)
TOTAL (20)
SIGN WITH DATE

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

Task No-3.2 — Aggregate functions

Date:-26/08/25

Aim:- To study and implement aggregate functions (count(), sum(), avg(), min(), max(),

Procedure :-

-> create a table named Bank-Account
-> Insert sample records.
-> write queries using aggregate functions
-> observe and record the output.

Commands with explanation.

1. count the total number of students

select count * as Total-amount from Bank-Acc

output :- Total_amount

2. find the highest amount in the account.

select max (balance) as highest-amount from Bank-account;

output :-

highest_amount
50000

3. find the average amount accounts.

Select avg (balance) as average-amount from Bank-account;

Output :-

Average amount
2850

4)-find minimum -Amount of the account

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

output :- min-account

10000

5)-find the -lotal amount in the Bank account in each category.

Query :- select category, Sum (balance) as total-amou from bank-account group by category :-

output :-

category	Total amount
Savings	30000
Savings	35000
RD	50000

6.)-find the average Balance per category ordered average Balance descending

Query :- select category, avg (balance) as avg-balance, bank-account groups by category order by avg-balancede

output:-

category	Avg-Balance
RD	50000
Salary	35000
Savings	

EX NO.	
PERFORMANCE (5)	3.2
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	3
RECORD (5)	4
TOTAL (20)	-
SIGN WITH DATE	14

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Result :- The implementation of Aggregate function executed successfully.