19/08/25

## Task 3.1 DML Commands using clauses, operations, Functions in queries.

Aim: To implement DML commands using clauses, operators & 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 user during routine operation of the database.

DML commands:

1. 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, 'Vivek', '7798812', '1000', 'Vizag');

SQL Insert into Patient values 2 'Smith' '998312', 'Thagarapuval', '2000');

SQL Insert into Patient Values 3. 'Shashank', '779914', 'Rajam', 2000);

~~SQL Insert into Patient Values 3~~

After Inserting:

| Patient ID | Patient Name | Ph no | Address | Patient Bill |
|---|---|---|---|---|
| 1 | Pavan | 7799138 | Vizag | 1000 |
| 2 | Smith | 999138 | Thagarapuvalu | 2000 |
| 3 | Shashank | 779914 | Rajam | 5000 |

2. update - set - where

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

syntax : SQL > update Table_name
SET column = value
where condition;

Example : SQL > update Patient
SET Patient_phno = '9913880'
where Patient_ID = 1

After updating :

| Patient ID | PatientName | Phno | Address | Patient Bill |
|---|---|---|---|---|
| 1 | Vivek | 9913880 | Vizag | 1000 |
| 2 | Smith | 99138 | Thagampalem | 2000 |
| 3 | Shashank | 779914 | Rajam | 5000 |

Delete_from_where :- This is used to delete records select of relation.

syntax : SQL > Delete from relation_name where condition;

Example : SQL > Delete from patient
where Patient_ID = 2

After Deleting :

| Patient ID | Patient Name | Ph no. | Address | PatientBill |
|---|---|---|---|---|
| 1 | Vivek | '99138' | Vizag | 1000 |
| 3 | Yaswanth | '99434' | Rajam | 5000 |

Truncate

This command will removed the data Permantly but structure will not be removed.

syntax : Truncate table <Table_name>

Example : Truncate Table Patient

Patient ID : Patientname Ph no Address PatientBill

Distinct

query: select Distinct Patient_Address
From Patient

output : Patient_Address
Vizag
Thagarapuvalasa
Rajam.

Union;

Query : select Patient Name As Name from Patient union
select doctor name as name from doctor.

output : Name
Pavan
Ulvelu
Smith
Yaswanth

| VEL TECH | |
|---|---|
| EX No. | 3.1 |
| PERFORMANCE (5) | 5 |
| RESULT AND ANALYSIS (5) | 5 |
| VIVA VOCE (5) | |
| RECORD (5) | 5 |
| TOTAL (20) | - |
| SIGN WITH DATE | 15 |

19/8/24

Result: The implementation of DML command using clauses, operators and Function in queries Executed successfully.

Task 3.2 Aggregate Functions

26/8/25

Aim: To study and implement aggregate Functions (count(), sum(), Avg(), min(), Max()) on a hospital mangement database

Procedure:
1. Create a table named patient
2. Insert sample records
3. write queries using aggregate Functions
4. Observe and record output.

Commands with Explanations
1. count the total number of patient
select count() as total_patient from Patient;
output: Total_patient: 3
2. Find the highest purchase obtained by a patient
select Max(Patient Bill) As heighest_Bill from Patient.
output: Highest_Bill: 5000
3. Find the average amount of patient Bill
select Avg(patient Bill) as Average_Bill amount from Patient;
output: Average_patient bill): 2666
4. Find minimum Purchase among patient in the hospital
select Min(Patient Bill) As Min Bill amount from patient.
output: min_Bill: 1000

5) Find the patient Bill in the Patient in Each category Patient name.

output:

| Patient name | Patient Bill |
|---|---|
| Pavan | 1000 |
| Smith | 2000 |
| Shashank | 8000 |

6) Find the avg amount for brand patient name by average descending.

select patient name, avg (Patient bill) as Avg. Patient bill from Patient groups by patientname included by avg - patient bill desc:-

output:

| patient name | Patient Bill |
|---|---|
| Shashank | 5000 |
| Smith | 2000 |
| Pavan | 1000 |

| VEL TECH | |
|---|---|
| EX No. | 3.2 |
| PERFORMANCE (5) | |
| RESULT AND ANALYSIS (5) | 5 |
| VIVA VOCE (5) | 5 |
| RECORD (5) | 5 |
| TOTAL (20) | 15 |
| SIGN WITH DATE | 26/8/3 |

Result: Thus the implementation of Aggregate Function executed successfully.