

18/8/25

Task 3.1

DML commands using drawn operators and functions in queries

Aim:

To implement ~~8~~ DML commands using clauses, operators, and function queries.

Data Manipulation language (DML)

The data manipulation language (DML) is used to insert and modify database information. Those modify database information -

the basic DML commands:

1. INSERT
2. UPDATE
3. DELETE

INSERT INTO

This is used to add records into a syntax.

Syntax:

Insert INTO < table name >  
Values. (data1, data2 ... data n);

Example:

INSERT INTO patient VALUES (111, (Aravind)  
Chetty, male);



Syntax:

Sol

UPDATE Table SET Field = data  
WHERE

Condition:

Example:

Sol,

UPDATE Patients SET Patient name  
= 'Kumar'  
WHERE Patient ID = 111;

Table after update:

Patient ID	Patient name	Department	Gender
111	Kumar	Cardiology	Male

Syntax:

Sol:

DELETE FROM table - name;

Example.

Sol:

DELETE FROM Appointments

Appointment table after Delete:

Appointment ID	Patient ID	Doctor ID	Appointment
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Syntax:

Sol.

DELETE FROM table - name WHERE  
Conditions.

Example:

Sal:

DELETE FROM nodes WHERE docdate DD= 202;

Doctor table after DELETE:

Doctor ID	Doctor NAME	Dept	fee
201	Dr. Raj	cardiology	1000
203	Dr. Ahmed	Neurology	9000
204	Dr. Rajah	ophtho	8000
205	Dr. jaseen	dermatology	7000

~~TRUNC~~

TRUNCATE:

~~This~~ removes all data permanently but keeps the table structure.

Syntax:

Sal,

TRUNCATE TABLE < table name >;

Example:

Sample Query and Output:

1. Retrieve patient name ending with letter 'n' and patient no 105.



Query:

Sal

Select Patient name, Department, Gender,  
from WHERE Patient Name like 'A' AND  
Patient ID

Patient Name	Department	Gender
Arun	Cardiology	male
Karan	Orthopedics	male
Rohan	Dermatology	male

2. List doctors where consultation  
b/w 700 and 800

Doctor ID	Doctor name	Gender	Fee
202	Dr. Raj	male	700
207	Dr. Symon	male	800

4. find appointments with date  $\geq 203...$

convey:

Appointment Date  $\geq 2003-00-07$

Appointments ID	Patient ID	Date ID	And
302	112	203	202-201
303	113	204	
304	114	200	
305	115	205	

List absent patient IDs.

Query

SELECT DISTINCT Patient ID from patients.

Patient ID

111

112

113

114

115

6. Combine patient IDs from

Query

Patient ID

111

112

113

114

116



7. Group patients based on gender and department query.

Sol:

Department	Gender	total patients
Cardiology	male	1
	female	1
Neurology	male	1
	female	1
Orthology	male	1
	female	1
Pediatrics	male	1
	female	1

8. Line doctor and their development using group by

Sol:

SELECT Doctor Name, Development,  
COUNT (\*)

FROM Doctor

GROUP BY Patient, Department

Doctor name	Department	Count
Dr Ahmed	Neurology	1
Dr shelva	Dentistry	1
Dr Divya	Rehab	1
Dr Anjali	Orthology	1

Procedures

1. Create a table named student
2. Insert sample record
3. Write queries using functions
4. observe and read the output

COMMANDS WITH EXPLANATION

VEL TECH	
EX No.	43
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	1
RECORD (5)	
TOTAL (20)	11
DATE	18/8/21

Result:-

The implementation of DML commands using clauses at and function in queries executed successfully.



18/8/25

Task 3.2 Aggregate function

(Multi Row operations)

Aim:

To study and implement aggregate function Count(), Sum()

AVG(), MIN(), MAX() on a sample patient database

Procedure:

1. Create a table named student
2. Insert sample record
3. Write queries using functions
4. Observe and read the output

COMMANDS WITH EXPLANATION:

Patient ID	Pol name	Del.	Bill Amount
101	Arun	Cardiology	2006
102	Shruti	Nursery	3050
103	Karnan	adlong	1506
105	Rohan	Natly	4000



2) Find the highest bill amount  
Sol.

```
SELECT MAX (BillAmount) AS Highest  
FROM Patients;
```

Output

Highest - Bill

4000

3. Find the average bill amount of  
Patients.

```
SELECT AVG (Bill amount) Avg (bill  
from patients.
```

Output

Average - Bill

2700

4. Find the Minimum bill amount  
among patients in A & C dept.

```
SELECT MIN (Bill amount) AS min,  
min Bill
```

Output

Min - Neuro - Bill

3500



output

Dept	Total Bill
Audiology	2000
Neurology	3500
Orthotics	4500
Relatives	1500
Pulmonary	4000

6. find the average bill, ordered by av descending.

SELECT Department, Avg (Department's patients)

GROUP BY Department

Output:

Dept	Avg Bill
relatives	4000
Neurology	3500
Pulmonary	2500
Orthotics	2000
Audiology	1500

Result:

The implementation of suggested functions are executed successfully.

EX No.	3
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	1
RECORD (5)	1
TOTAL (20)	14
SIGN WITH DATE	18/8/20