Task-3- Using Clauses, Operators And Functions In Queries

Title:- Implementation of DML commands using clauses, operators and functions in queries.

* Insert Table.
* select Table.
* update Table.
* Delete Table.

objective:-

* To understand the different input involved in the design and implement ation of a database system.

theory:-

Data manipulation Language (DML):-

the Data Manipulation Lananguage is used to retrieve, insert and modify database information. Lets take a brief look at the basic DML commands.

1) Insert 2) update 3) Delete

1) Insert Into:- this is used to add records into a relation. these are three type of Insert into Querier which are ary.

Insertion a single word:-

Syntax:- INSERTI nto < relation |tableName> .
(field-1, field 2 ---- field-n) V ES
(data-1, data-2, data-n);

2. update-set-wheren :- this is used to update the content of a record in a relation.

syntax:- SQL> update relation name JET Field name 1>data, field > name 2 =data, where field-name =data;

3) Deletefrom:- 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 of relation.

syntax:- SQL> Delete From relation_name;

b) Delete-From-where: This is lined to delete a selected record from a valation.

Syntax:- SQL> Delete from relation_name WHERE Condition;

4. TRUNCATE:- this command will remove the data permanently But structure will not be removed.

Output:-

Total employees
Employees with salary
54

output:-

highest salary
90000

output:-

lowest salary
65000

output:-

avg salary
77500

Output

Available Tables

shipping_id	status	customer
1	Pending	2
2	Pending	4
3	Delivered	3
4	Pending	5
5	Delivered	1

STUDENTS

ROLLNO	Name	AGE
101	Rahul	

Output

Total pay

31000

Table 3.2

AGGREGATE FUNCTIONS (MULTI ROW OPERATION)

Aim:- To study and implement aggregate functions (COUNT(), SUM(), AVG(), MIN(), MAX()) on a sample student database

Procedure:

1) Create a table named students.
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_students FROM students;
```

Explanation:-

* MAX(Marks) return the max value in Marken column.
* As Total_students gives a user_friendly column name.

2) Find the highest mark obtained by a student

```
select Max (Marks) As Higher_Mark From
students;
```

Explanation:-

* MAX(Marks) returns the max. value in the marks column.
* this tells us the scorer's mark.

3) Find the average marks of students

```
select AVG(Marks) As Avg_mark From students;
```

Explanation:-

*AVG(Marks) Calculates the mean (average) of all student marks.

4) Find the minimum marks among students in the ECE department

```
select Min (Marks) As Min_ECE_Mark From students.
where Department = "ECE";
```

Explanation:-

* MIN(Marks) Finds the lowest mark.
* where Department = 'ECE' restricts the calculation only to ECE students.

5) Find the total marks scored by students in each department

```
select Department, SUM (Marks) As Aug_Marks From students
Group By Department.
```

Explanation:-

* SUM (Marks) adds up marks.
* Group By Department ensure that the total is calculated for each department seperately.

Result:- Thus the SQL commands executed successfully based on student Database management system.

VEL TECH - CSE	
EX NO.	3
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	5
TOTAL (20)	20
SIGN WITH DATE	9