

Practical No: 2

Page No.

Date

- Date of Experiment : 25th March 2023
- Aim : Implementation of DDL and DML commands in SQL
- Theory : DDL stands for Data Definition Language. DML stands for Data Manipulation Language. These two categories of command are used to create, modify and manipulate the structure and data of relational database.

The UPDATE command is a DML command that modifies existing data in a table. The syntax for it is →

UPDATE table-name

SET column-name = new-value

WHERE condition;

The SET keyword specifies the new value for the specified column, the WHERE filter clause is used to filter out the rows that need to be updated.

for eg: UPDATE stores

SET status = "closed"

WHERE id IN(1,2,3);

DELETE FROM is another DML command that is used to delete one or more rows from a table. The syntax is as follows.

DELETE FROM table-name

WHERE condition;

E.g. DELETE FROM stores WHERE id = 69;

The EXISTS keyword is used to test for the existence of a subquery. A subquery is usually a select statement that return a set of rows, and the exist keyword is used to check if any rows are returned by the subquery. The

Syntax is as follows,

SELECT column-name(s)
FROM table-name

WHERE EXISTS (subquery);

It is usually used with the NOT keyword.

For eg : SELECT * FROM orders

WHERE NOT EXISTS (

SELECT * FROM payments

WHERE payments.order-id = order-id);

-- This query returns all the orders that do not have any associated payments.

- 1) Decrease the salary of Vijay by 100 if Sunil and Vijay are living in city Madras.
- Ans: Before running the query:

+ Options	
ename	city
Sunil	Madras
Vijay	Madras

+ Options				
ename	cname	salary	jdate	
Vijay	TATA	50000	2023-04-04 16:30:43	
Sunil	ACC	40000	2023-04-04 16:29:32	

After running this query:

```
UPDATE emp_company ec SET ec.salary = (SELECT ec.salary FROM emp_company ec WHERE ec.ename='Vijay')
- 100 WHERE ec.ename = 'Vijay' and EXISTS(SELECT e.ename FROM employee e WHERE e.ename = 'Vijay' and
e.city = 'Madras' and e.city IN (SELECT e.city FROM employee e WHERE e.ename = 'Sunil'));
```

+ Options

ename	cname	salary	jdate
Sunil	ACC	40000	2023-04-04 16:29:32
Vijay	TATA	49900	2023-04-04 16:30:43

- 2) All employees of 'ACC' having salary greater than 8000 are shifted to 'TATA'.

Ans: Before running the query:

+ Options

ename	cname	salary	jdate
Sunil	ACC	40000	2023-04-04 16:29:32
Vijay	TATA	49900	2023-04-04 16:30:43

After running this query:

```
UPDATE emp_company ec SET ec.cname = 'TATA' WHERE ec.salary>8000 and ec.cname = 'ACC';
```

+ Options

ename	cname	salary	jdate
Sunil	TATA	40000	2023-04-04 16:29:32
Vijay	TATA	49900	2023-04-04 16:30:43

- 3) Decrease the salary of employee Vijay by 100 and increase the salary of employee Sunil by 100.

Ans: Before running the query:

+ Options

ename	cname	salary	jdate
Sunil	TATA	40000	2023-04-04 16:29:32
Vijay	TATA	49900	2023-04-04 16:30:43

After running this query:

```
UPDATE emp_company ec SET ec.salary = (SELECT ec.salary FROM emp_company ec WHERE ec.ename = 'Vijay') + 100 WHERE ec.ename = 'Vijay';
```

AND

```
UPDATE emp_company ec SET ec.salary = (SELECT ec.salary FROM emp_company ec WHERE ec.ename = 'Sunil') - 100 WHERE ec.ename = 'Sunil';
```

+ Options

ename	cname	salary	jdate
Sunil	TATA	39900	2023-04-04 16:29:32
Vijay	TATA	50000	2023-04-04 16:30:43

- 4) Delete the rows of emp_company having salary greater than 8000:

Ans: Before running the query:

+ Options

ename	cname	salary	jdate
Sunil	TATA	39900	2023-04-04 16:29:32
Vijay	TATA	50000	2023-04-04 16:30:43

After running this query:

```
DELETE FROM emp_company WHERE salary > 8000;
```

