

EXPERIMENT - 3

ATM: Implementation of TN clause and EXISTS clause in Squ

THEORY: A clause in Sql is a built-in function that helps to fetch the required records in database table. A clause reciers a carditional expression, is a column name or some terms involving the columns. The clauses calculates the result based on the given statements in the expression. When a large amount of data is stored in the database, clauses are helpful to filter and analyze the queries.

The WHERE clause in SPL is used to recieve the specific data from database that specifies the conditions exactly that are given in the UPDATE, DELETE, etc. Statements.

The FORM clause in SQL is used to select the database tables, which are manipulated using the SELECT,

DELETE and UPDATE STATEMENTS

The AND close is used when multiple conditions are specified in a genery and returns a dataset when all the conditions given in the AND clause meet the requirements

The op dause is used when multiple canditions are specified in a guery and returns a dataset when are of the condition gets satisfied.

An operator is a resurred keyword or special symbol which can be used to perform some specific logical and mathematical computation on operands.

Sol operators are used with the Sol WHERE clause for runing results based or some specific logical a mathematical computation.

expression matches any value in the list of values, stir used to semare the need for multiple of cenditions in SFIFET, INSFRT, UPDATE or DELETE. 9th is used to retrieve records that matches the set of separated by commons.

Systax: SFLECT coloname From table name. WHERE Coloname IN (ist-of-values):

Frample: SELECT Name From Emp WHERE salary
The (30000, 40000, 50000);

b) EXTITS operator: The EXTITS operator is used to creck if the specific value exists in the result of the inner sub-query or not. The result of EXTITS is a booken value. TRUE OR FALSE. It can be used in a SELECT, UPPATE, TRISERT OF DELETE Statement.

Syntax: SFLECT col_name from table_name WHERE

EXTITY (SFLECT col_name

From table name

WHERE cendition);

Example: SELECT frame, frame From Customers
LIHERE EXISTS (SELECT *

FROM Orders WHERE

Custamers custemer id = Orders. c - id);

INPUT:

```
DROP TABLE IF EXISTS Employee;
DROP TABLE IF EXISTS Emp_Company;
DROP TABLE IF EXISTS Company;
DROP TABLE IF EXISTS Manager;
DROP TABLE IF EXISTS Emp_Shift;
CREATE TABLE Employee(ename varchar2(10), city varchar2(10));
CREATE TABLE Emp_Company(ename varchar2(10),cname varchar2(10),salary
number(7,2), jdate date);
CREATE TABLE Company(cname varchar2(10), city varchar2(10));
CREATE TABLE Manager(ename varchar2(10),mname varchar2(10));
CREATE TABLE Emp_Shift(ename varchar2(10), shift varchar2(10));
INSERT INTO Employee values
('Sunil', 'Madras'), ('Vijay', 'Madras'), ('Amar', 'Bombay'), ('Atharva', 'Delhi'
);
INSERT INTO Emp_Company values ('Sunil', 'ACC',5000,'01-SEP-
2027'),('Vijay','ACC',40000,'01-SEP-2027'),('Amar','Microsoft',6000,'01-
SEP-2027'), ('Atharva', 'Google', 60000, '01-SEP-2027');
INSERT INTO Company
values('ACC','Madras'),('TATA','Bengaluru'),('Microsoft','Bombay'),('Googl
e','Delhi');
INSERT INTO Manager values
('Sunil', 'Sharvari'), ('Vijay', 'Sunil'), ('Amar', 'Mahi'), ('Atharva', 'Rucha')
INSERT INTO Emp Shift
values('Sunil','A'),('Vijay','A'),('Amar','B'),('Atharva','C');
SELECT * FROM Employee;
SELECT * FROM Emp_Company;
SELECT * FROM Company;
SELECT * FROM Manager;
SELECT * FROM Emp_Shift;
```

DATABASES:

Employee

ename	city
Sunil	Madras
Vijay	Madras
Amar	Bombay
Atharva	Delhi

Company

cname	city
ACC	Madras
TATA	Bengaluru
Microsoft	Delhi
Google	Delhi

Emp_Company

ename	cname	salary	jdate
Sunil	ACC	5000	01-SEP-2027
Vijay	ACC	40000	01-SEP-2027
Amar	Microsoft	6000	01-SEP-2027
Atharva	Google	60000	01-SEP-2027

Manager

ename	mname
Sunil	Sharvari
Vijay	Sunil
Amar	Mahi
Atharva	Rucha

Emp_Shift

ename	shift
Sunil	А
Vijay	А
Amar	В
Atharva	С

Query 1: Find the employee names and cities they live in for the employee working in company 'ACC'.

Code:

```
SELECT e.ename,e.city FROM Employee e WHERE e.ename IN(SELECT
ec.ename FROM Emp_Company ec WHERE ec.cname = "ACC");
```

Output:

ename	city
Sunil	Madras
Vijay	Madras

Query 2: List the employee living in city 'Bombay' and those having company located in 'Delhi'.

Code:

```
SELECT e.ename FROM Employee e WHERE e.city='Bombay' and EXISTS (SELECT c.city FROM Company c WHERE c.city='Delhi');
```

Output:

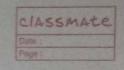


Query 3: List the names of employees living in same city where 'Sunil' is living.

Code:

```
SELECT e.ename FROM Employee e WHERE e.city IN (SELECT e1.city FROM
Employee e1 WHERE e1.ename='Sunil');
Output :
```





CONCLUSTON: 9N clause and EXISTS clause are being understood and implemented/executed in the queries.