MULTITABLE QUERY STRUCTURE

GROUP SIX

GROUP MEMBERS

1. ASIA MARVIN
2. AMOS ADE
3. LOGOYA PATRICK
4. MULOKI JOSEPH
5. LUBOGO PATRICK
6. AMABE TRINITY
7. NKUNDA PEREZ
8. WANI DANIEL
9. OTWIINE ELIZABETH
10. DILLI TONNY
11. BENEDICT ANGWEZU
12. DUKU

INTRODUCTION

multiple-table query blends together information from two or more related tables.

The main difference between a multiple-table query and a single-table query is that with multiple-table queries, Access creates a link between related tables.

SELECT

A select is used to return only different values.

A simple SELECT statement is the most basic way to query multiple tables.

You can call more than one table in the statement's FROM clause to combine results from multiple tables.

Syntax:

SELECT table1.column1, table2.column2 FROM table1, table2 WHERE table1.column1 = table2.column1;

The (.) dot notation uses the period character to separate the table and column

Sample table

Staff_table

Create table staff(name varchar(20), staff_id varchar(20) PRIMARY KEY);

INSERT INTO staff values('Diana', 'staff/003');

INSERT INTO staff values('Anet', 'staff/005');

name	Staff_id
Diana	Staff/003
Annet	Staff/005

Sample table

Student_table

Create table students(name varchar(20), student_id varchar(20) PRIMARY KEY, course varchar(20), gender varchar(30), FOREIGN KEY (Staff_id REFERENCES staff(staff_id));

INSERT INTO students values('Amos', 'BSIT/003', 'BSIT', 'Male');

INSERT INTO students values('Trinity', 'DEIT/004', 'DEIT', 'Male');

INSERT INTO students values('Emma', 'BSIT/002', 'BSIT', 'Male');

name	Student_id	Staff_id	course	gender
Amos	BSIT/003	staff/003	BSIT	Male
Trinity	DEIT/004	staff/003	DEIT	Male
Emma	BSIT/002	staff/005	BSIT	Male

Selecting staff_table and students_table

SELECT students.students_id, staff_id.name FROM students, Staff WHERE students.students_id = staff.staff_id;

JOINS

Joining Tables

A join is a clause is used to combine rows from two or more tables, based on a related column between them.

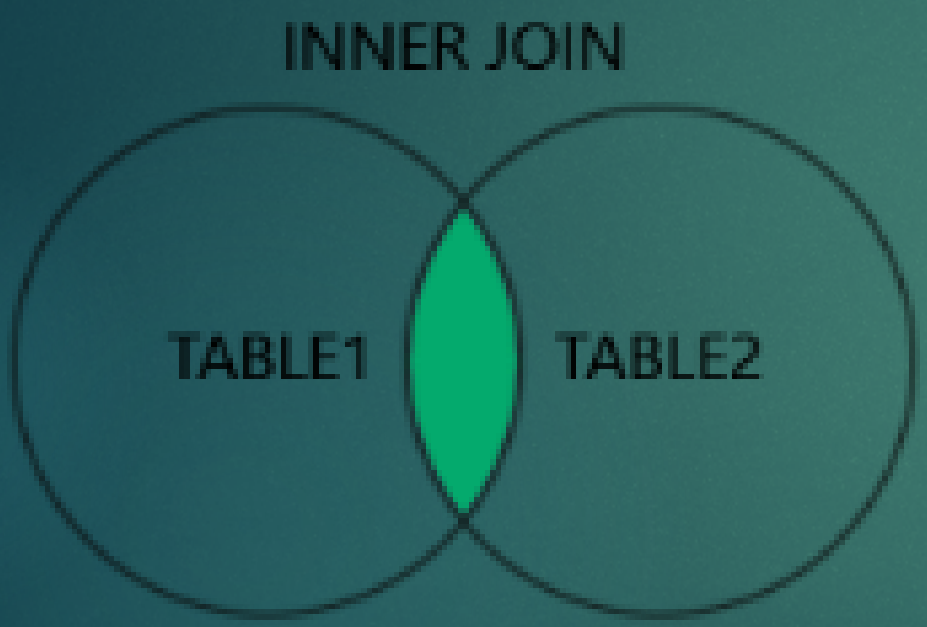
Types of joins.

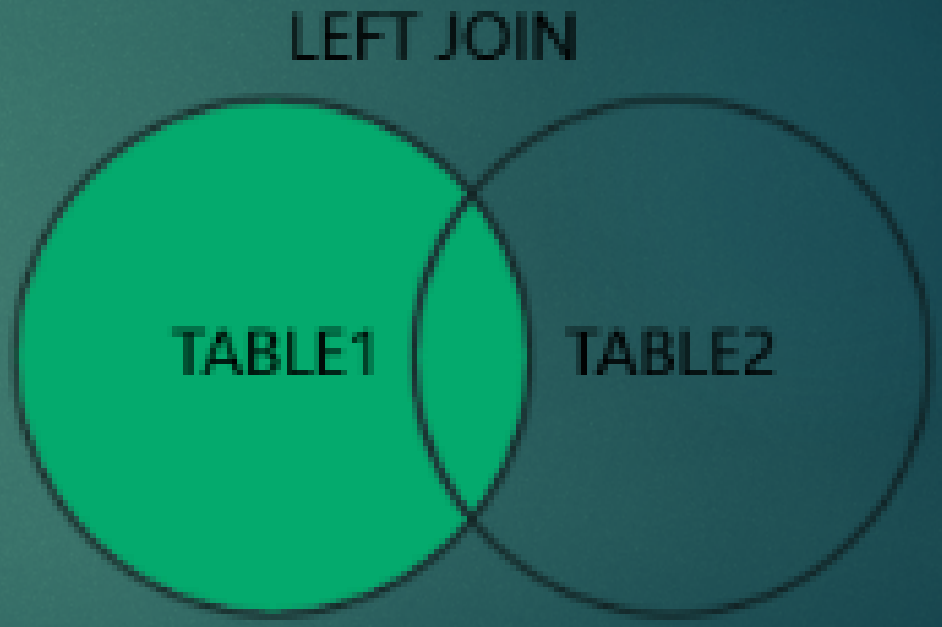
Inner join: returns records that have matching values in both tables.

Left join: returns all records from the left the left table, and the matched records from the right table.

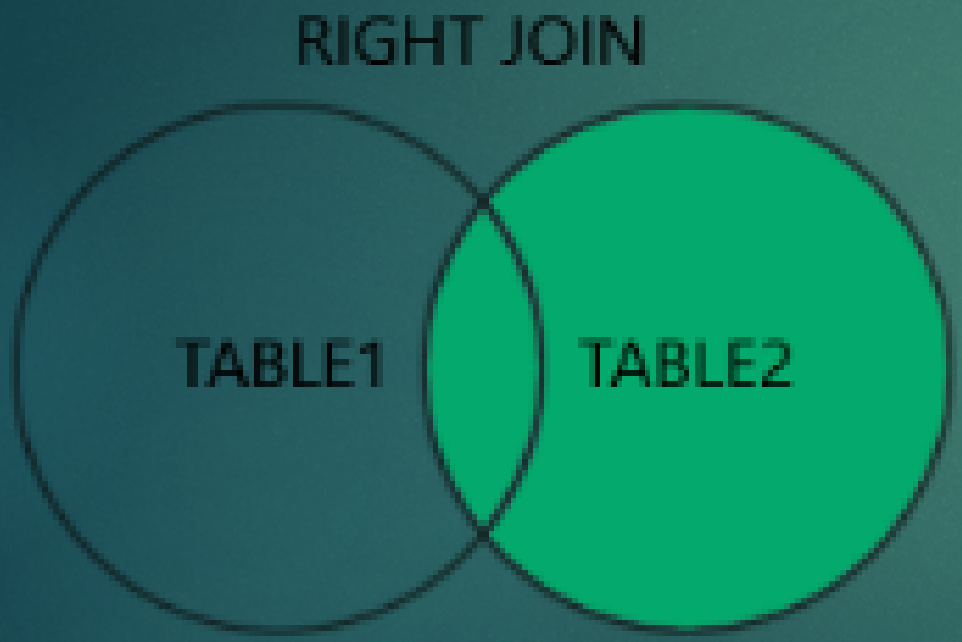
Right join: returns all records from the right table, and the matched records from the left table.

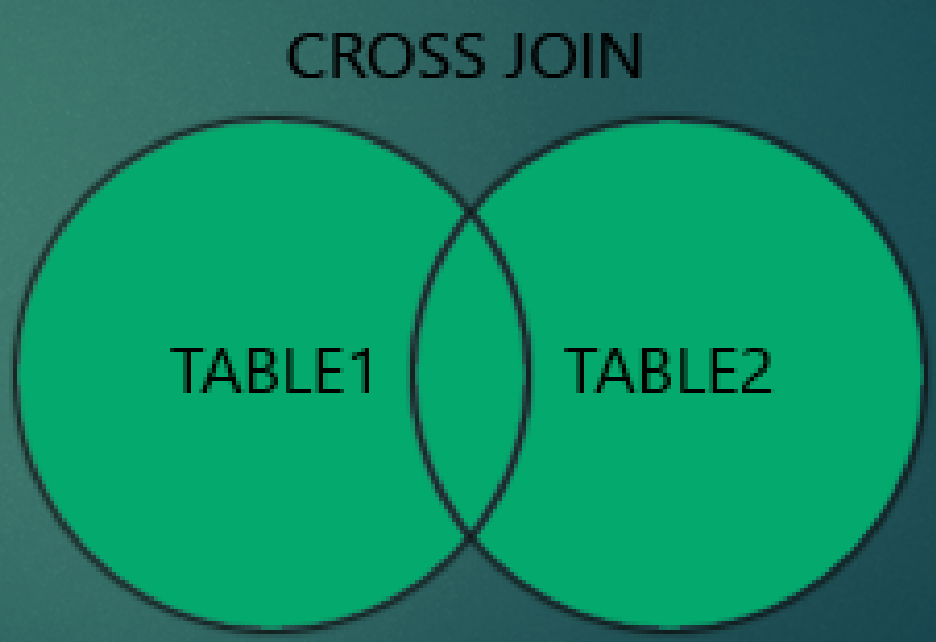
Samples





CON'T





Demonstrating tables

customer_table

Customer_name	Customer_id	Contact_name	country
Amos	890	Trinity	Uganda
Tony	780	Patrick	Kenya
Lisi	546	Duku	Congo
Wani	768	Elizabeth	Uganda

Order_table

Order_id	Customer_id	Order_date	
1098	890	02-07-2023	
1076	780	03-07-2023	
2789	546	04-07-2023	
6578	768	05-07-2023	

Inner join

Returns records that have matching values in both tables.

```
SELECT order.order_id, customer.customer_name, order.order_date FROM order
INNER JOIN customer ON order.order_id = customer_name;
```

Query result:

Customer_name	Order_id	Order_date
Amos	1098	02-07-2023
Tony	1076	03-07-2023
Lisi	2789	04-07-2023
Wani	6578	05-07-2023

Left join

Returns all records from the left table (table1), and the matching records (if any) from the right table(table2).

SELECT customer.customer_name, order.order_id FROM customer LEFT JOIN Orders ON customer.customer_id = order.customer_id Order By customers. customer_name;

Customer_name	Order_id
tony	1076
tony	1054
Wani	6578
Wani	6795

This statement returns all records from the left table(customer_table), even if there are no matches in the right table(order_table)

Right Join

Returns all records from the right table(table2), and the matching records (if any) from the left table(table1).

Syntax:

SELECT column_name(s) FROM table1 RIGHT JOIN table2 ON table1.column-name= table2.column-name;

UNION OPERATOR

The union operator is used to combine the result-set of two or more select statements.

- Every select statement within UNION must have the same number of columns.
- The columns must also have similar data types.
- The columns in every select statement must also be in the same order.

CON'T

Syntax

SELECT column_name(s) FROM table1 UNION select column_name(s) FROM table2;

DELETE

The delete statement is used to delete existing records in a table.

syntax

DELETE FROM table_name

WHERE condition;

THANK YOU!