SQL

There are four different types of JOINs in SQL:

* **(INNER) JOIN:** Retrieves records that have matching values in both tables involved in the join. This is the widely used join for queries.

**SELECT** \*

**FROM** Table\_A

**JOIN** Table\_B;

**SELECT** \*

**FROM** Table\_A

**INNER** **JOIN** Table\_B;

* **LEFT (OUTER) JOIN:**Retrieves all the records/rows from the left and the matched records/rows from the right table.

**SELECT** \*

**FROM** Table\_A A

**LEFT** **JOIN** Table\_B B

**ON** A.col = B.col;

* **RIGHT (OUTER) JOIN:**Retrieves all the records/rows from the right and the matched records/rows from the left table.

**SELECT** \*

**FROM** Table\_A A

**RIGHT** **JOIN** Table\_B B

**ON** A.col = B.col;

* **FULL (OUTER) JOIN:**Retrieves all the records where there is a match in either the left or right table.

**SELECT** \*

**FROM** Table\_A A

**FULL** **JOIN** Table\_B B

**ON** A.col = B.col;

**What is a Self-Join?**

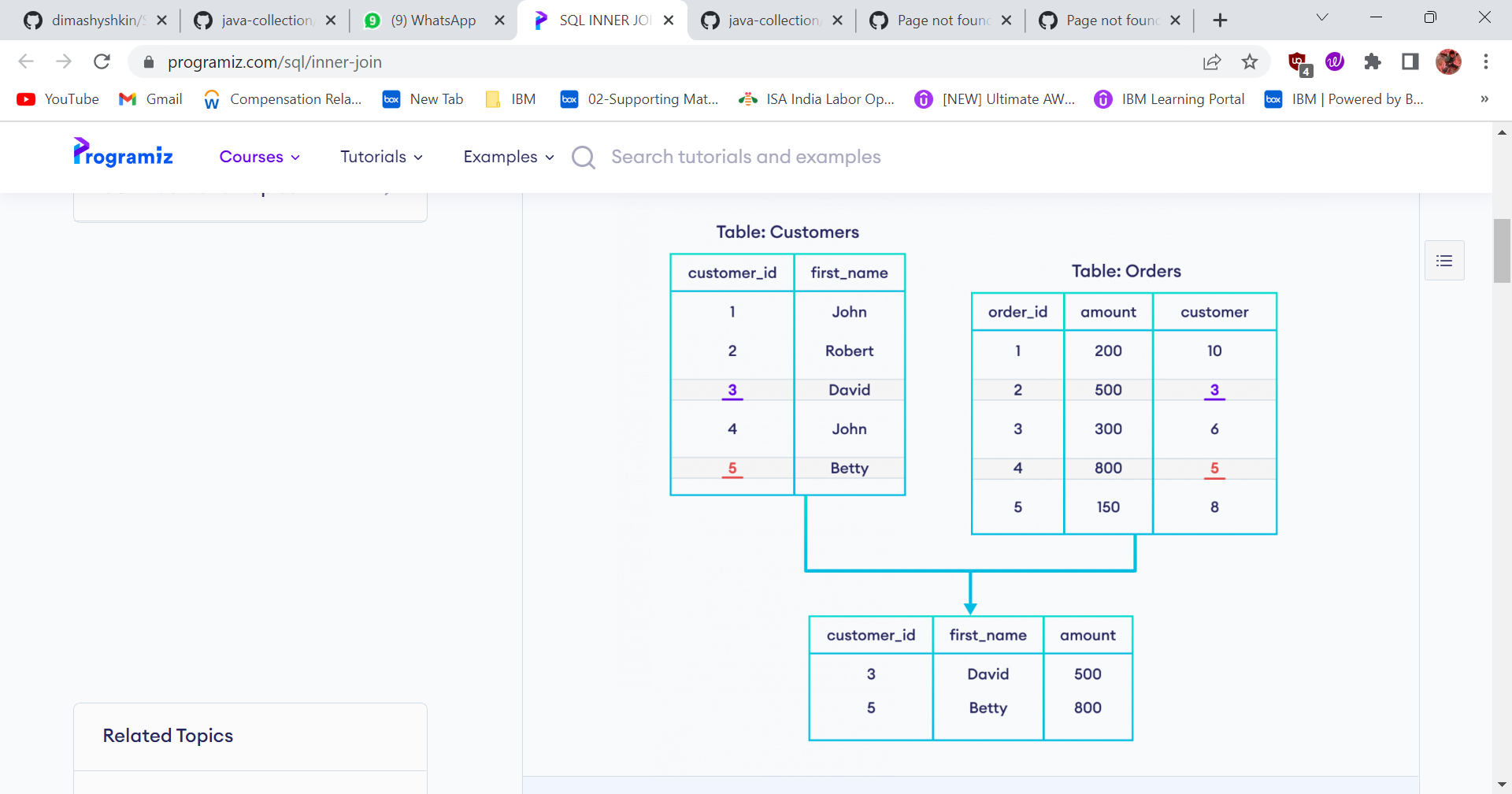
A**self JOIN** is a case of regular join where a table is joined to itself based on some relation between its own column(s). Self-join uses the INNER JOIN or LEFT JOIN clause and a table alias is used to assign different names to the table within the query.

**SELECT** A.emp\_id **AS** "Emp\_ID",A.emp\_name **AS** "Employee",

B.emp\_id **AS** "Sup\_ID",B.emp\_name **AS** "Supervisor"

**FROM** employee A, employee B

**WHERE** A.emp\_sup = B.emp\_id;



Inner join Query

Select Customer.customer\_id ,Customer.first\_name ,Orders.amount

Frome Customer

Inner join Orders

On Customer.customer\_id = Orders.customer

ON – ON Clause can be used to join columns that have different name

We use ON clause to specify a join condition

Graphical user interface, text

Description automatically generated

Left Outer join

Select \*

From Customers

Left join Orders

ON Customers.customer\_id = Orders.customer

A screenshot of a computer

Description automatically generated

SELECT Customers.customer\_id, Customers.first\_name, Orders.amount

FROM Customers

LEFT JOIN Orders

ON Customers.customer\_id = Orders.customer

WHERE Orders.amount >= 500;

Graphical user interface

Description automatically generated

Right Outer join

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Description automatically generated with medium confidence

SELECT Customers.customer\_id, Customers.first\_name, Orders.amount

FROM Customers

RIGHT JOIN Orders

ON Customers.customer\_id = Orders.customer

WHERE Orders.amount >= 500;