SQL Self Join

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  applied when a table must join itself

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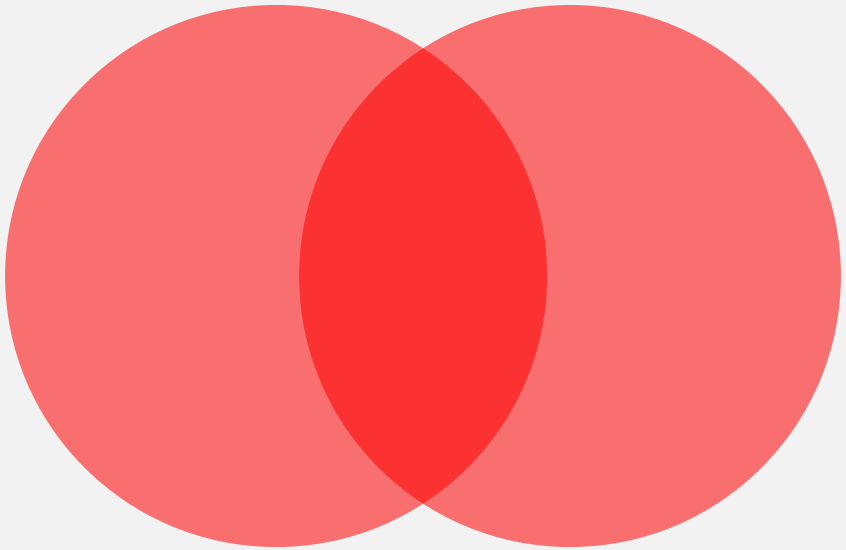
- if you'd like to combine certain rows of a table with other rows of the same table, you need a self-join

INNER JOIN

dept_manager_dup

```
dept_no CHAR(4)
emp_no INT
from_date DATE
to_date DATE
```



departments_dup

```
dept_no CHAR(4)
dept_name VARCHAR(40)
```

Related column: dept_no

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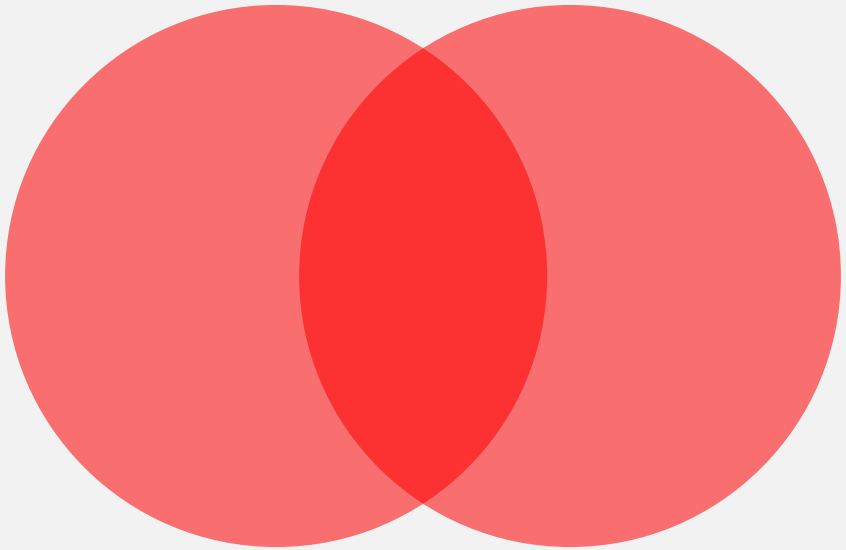

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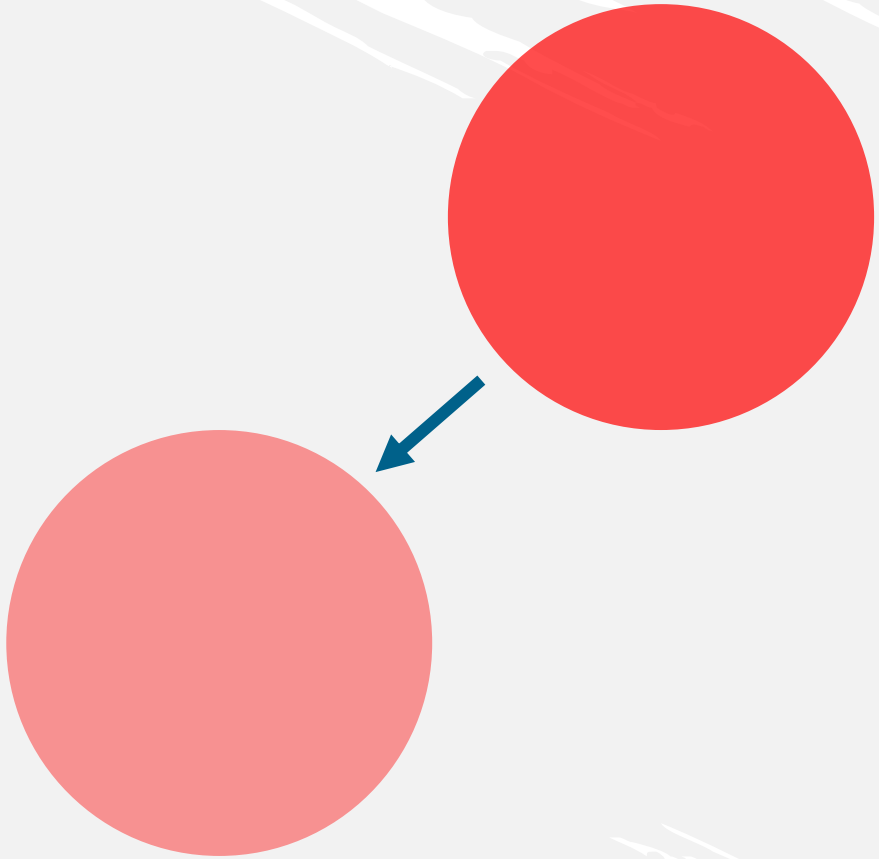

- the 2 tables will be *identical* to the table you'll be using in the self-join

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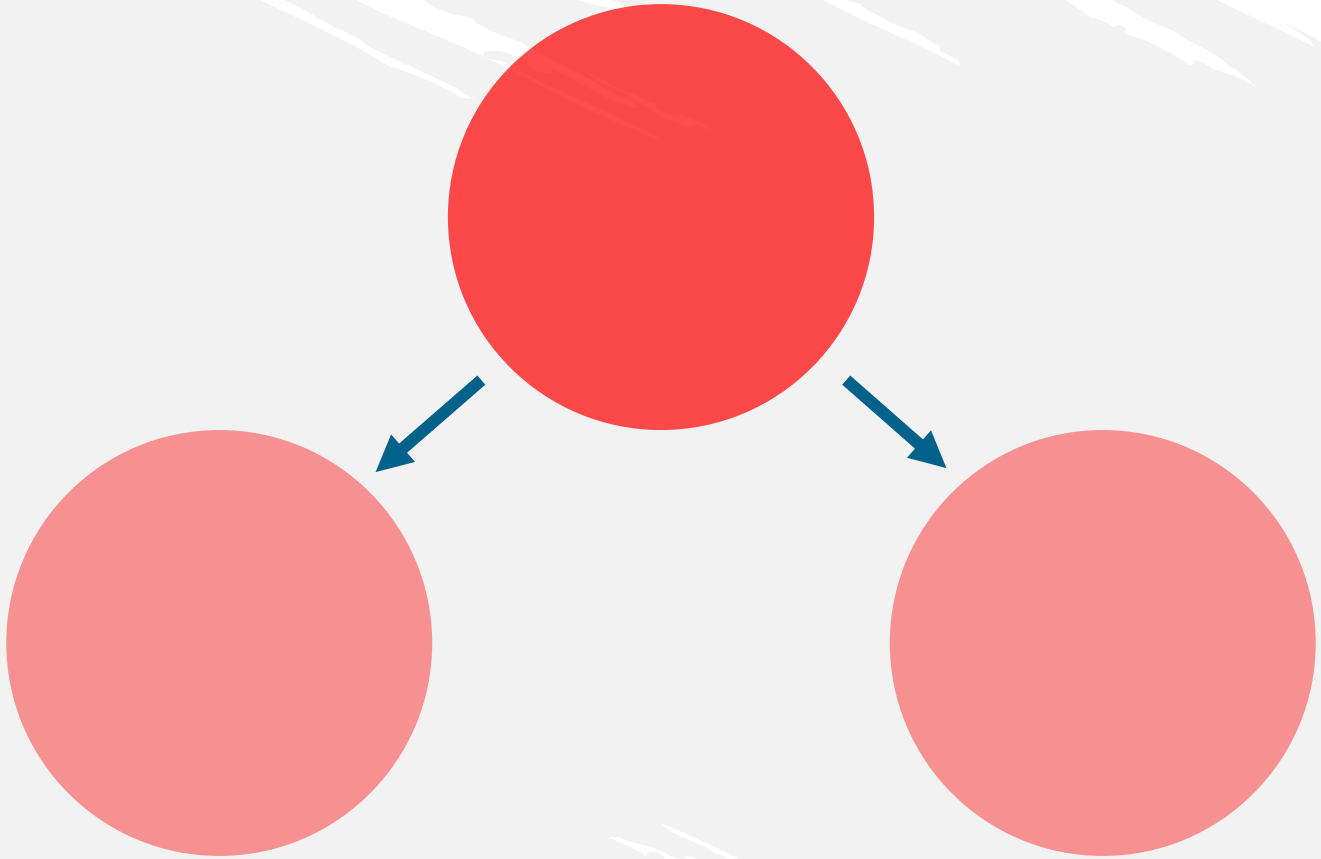

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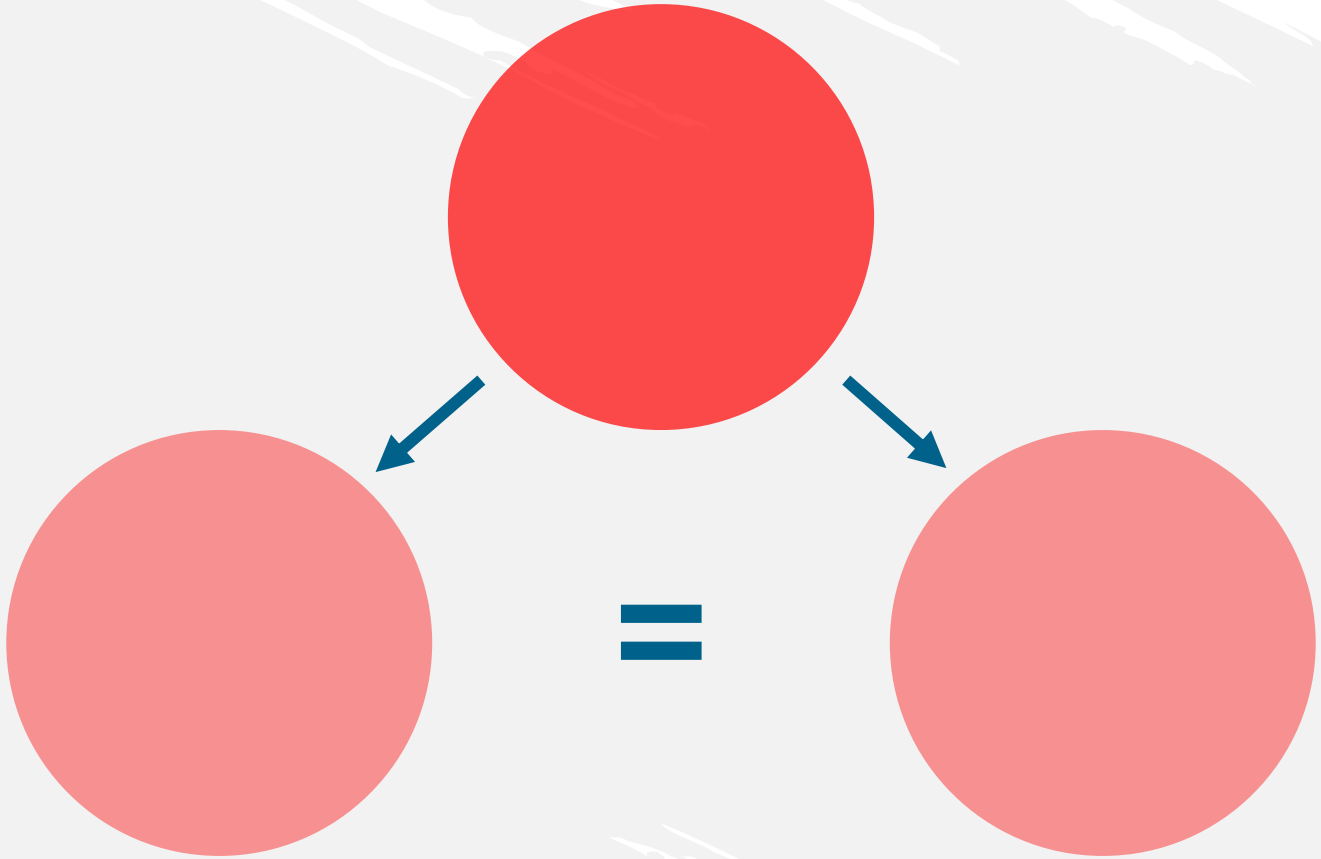

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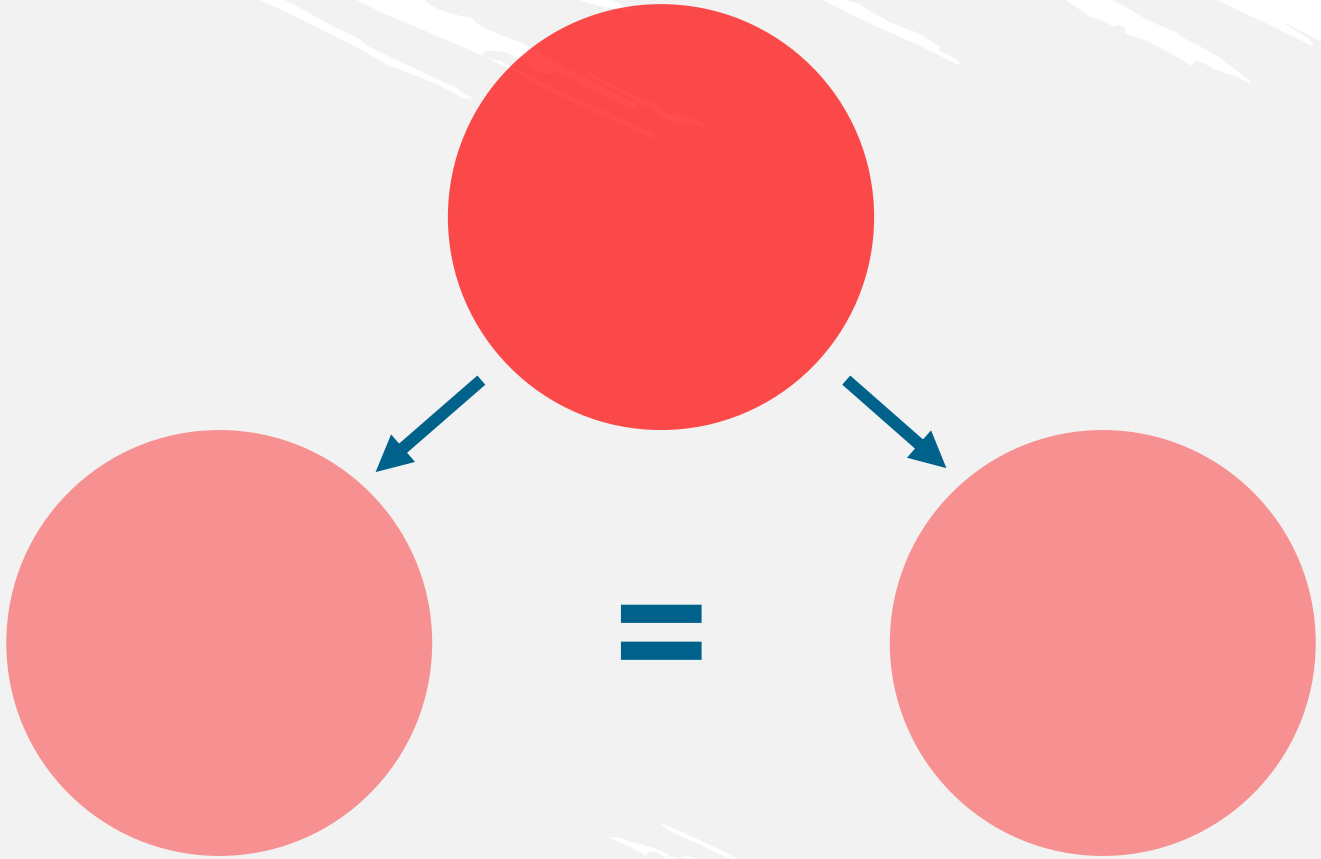

- the 2 tables will be *identical* to the table you'll be using in the self-join
- you can think of them as virtual projections of the underlying, base table

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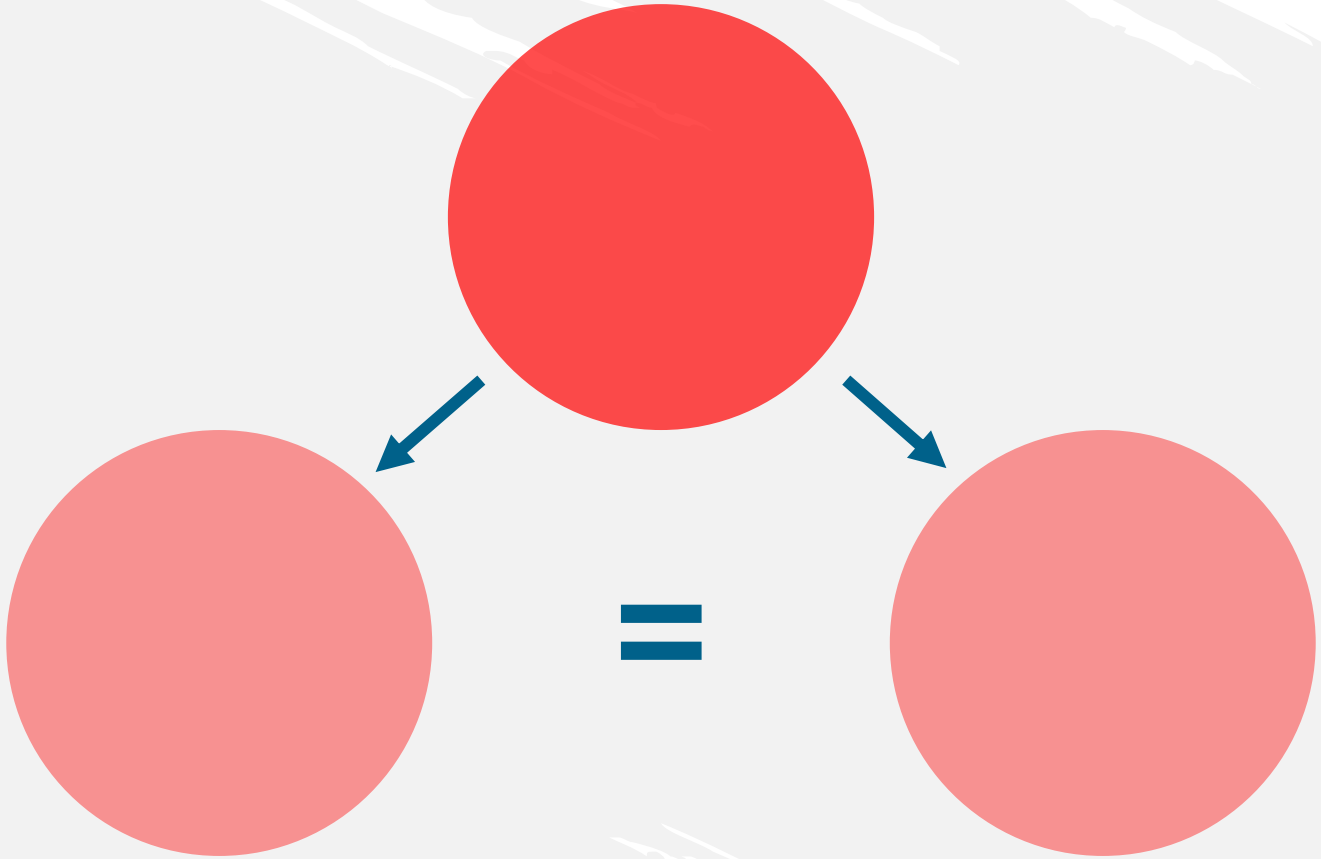

- the self-join will reference both implied tables and will treat them as two *separate* tables in its operations

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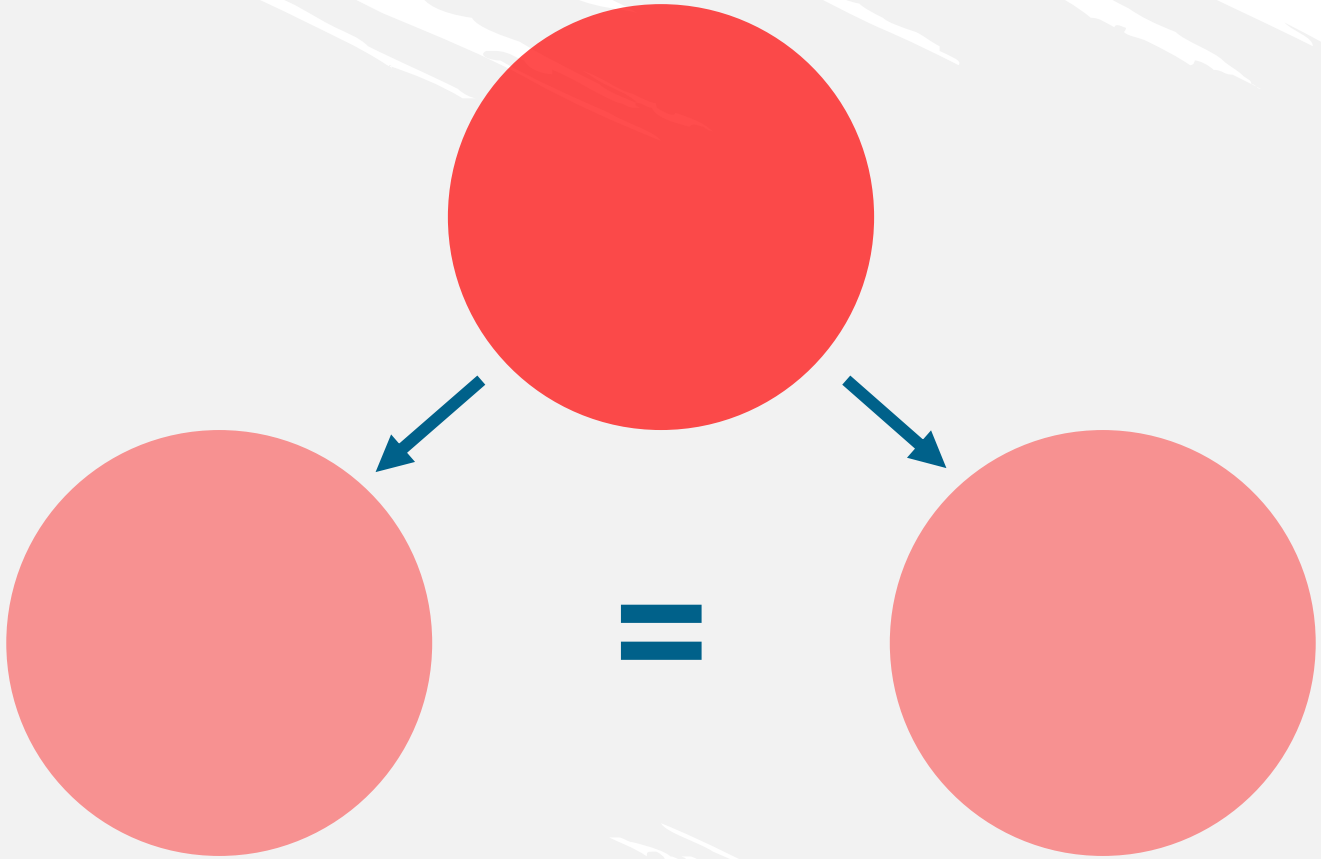

- the data used will come from a single source, which is the underlying table that stores data *physically*

INNER JOIN

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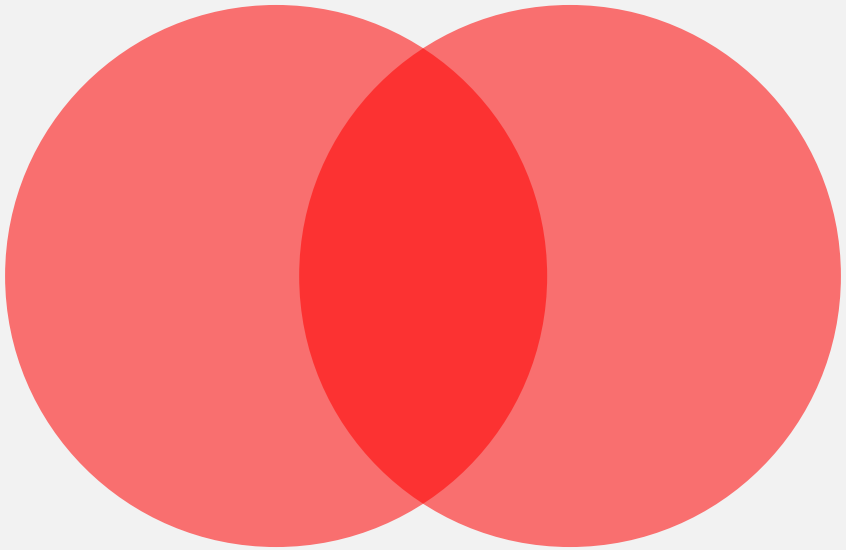

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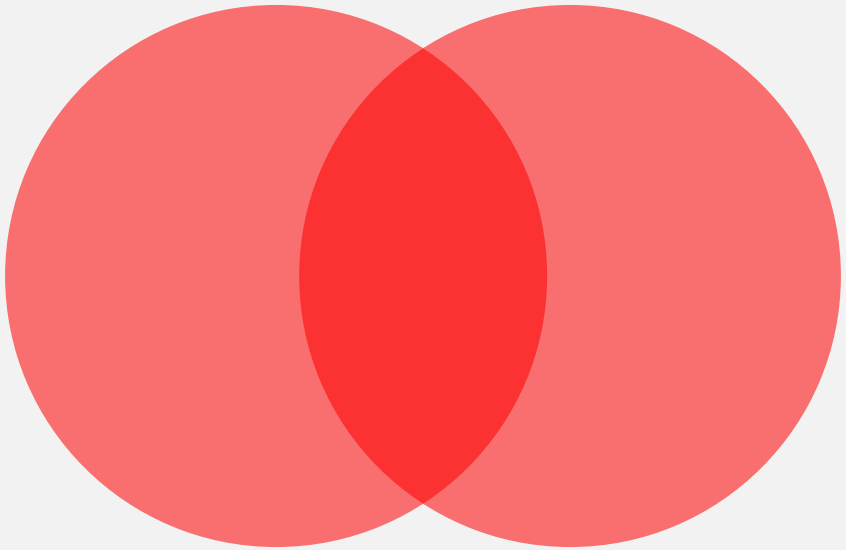
M



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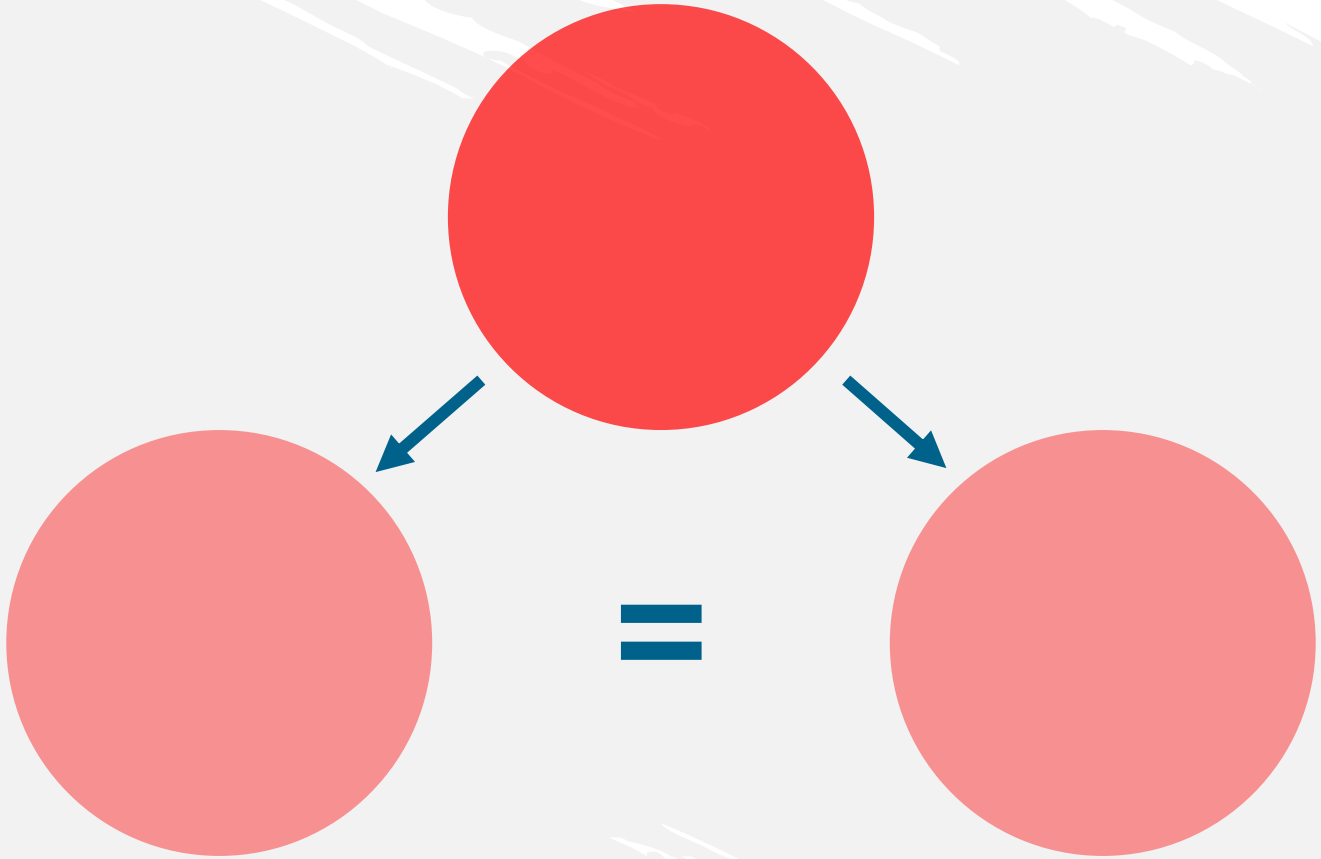

- using aliases is *obligatory*

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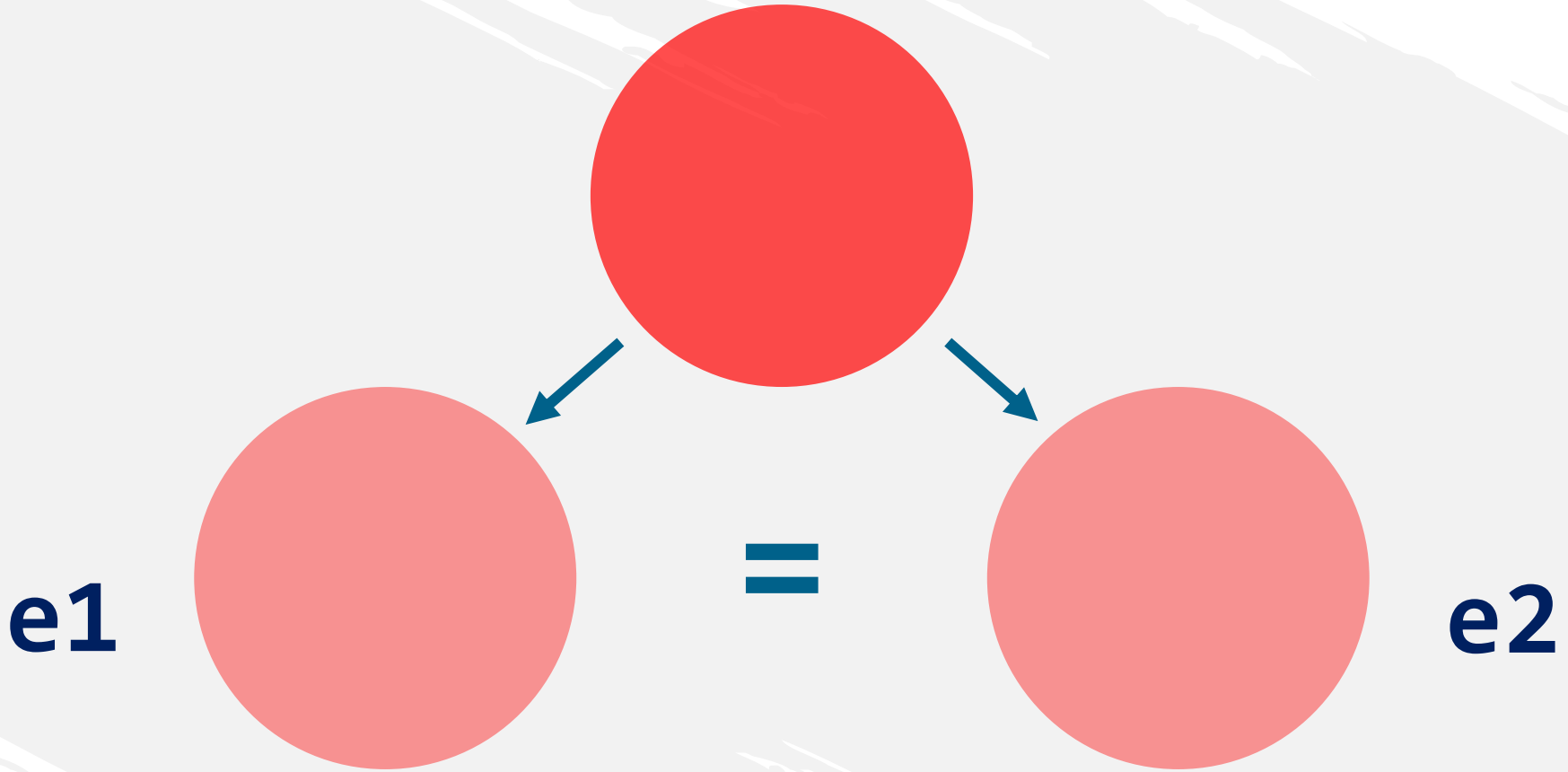

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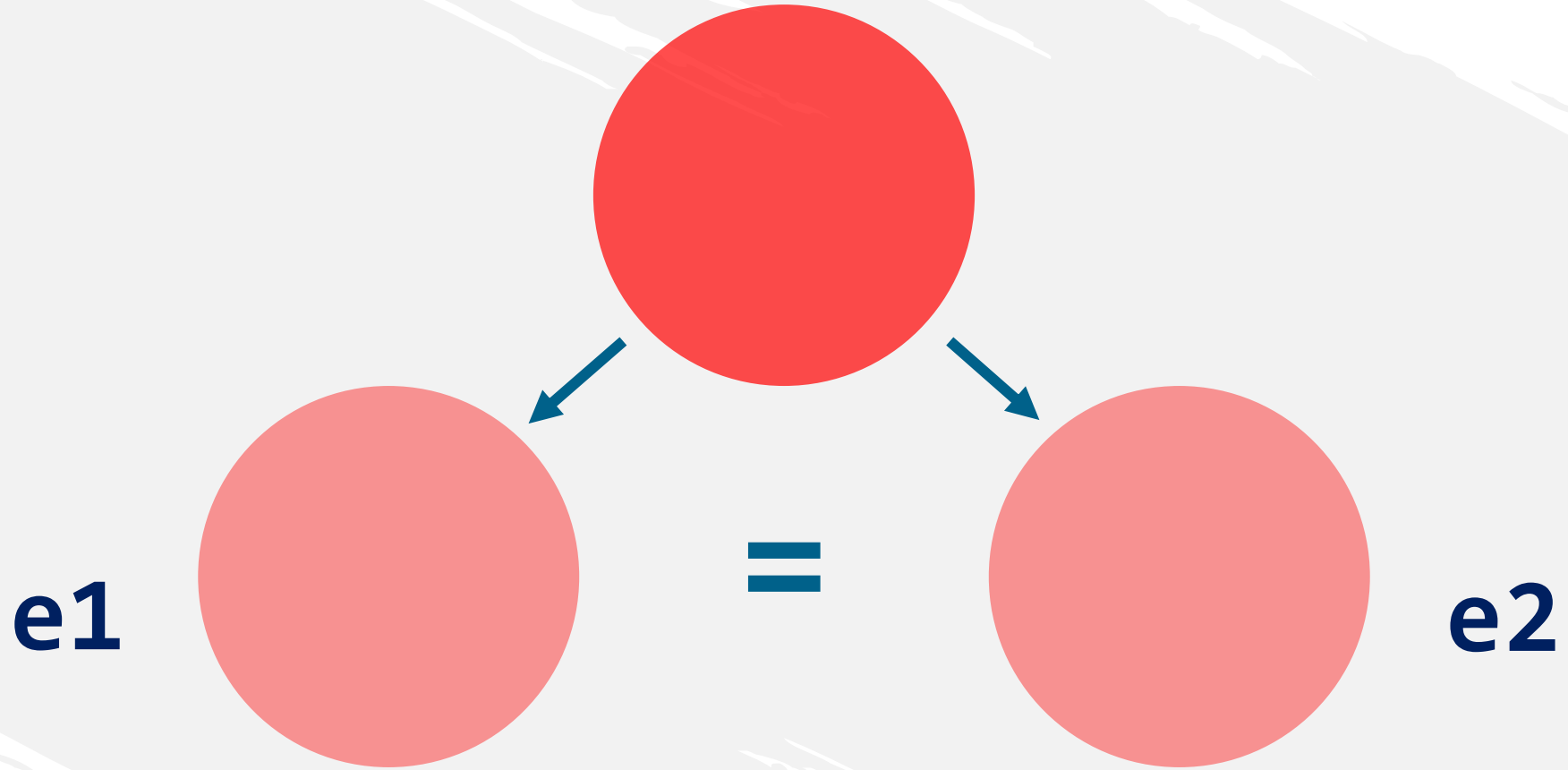

- these references to the original table let you use different blocks of the available data

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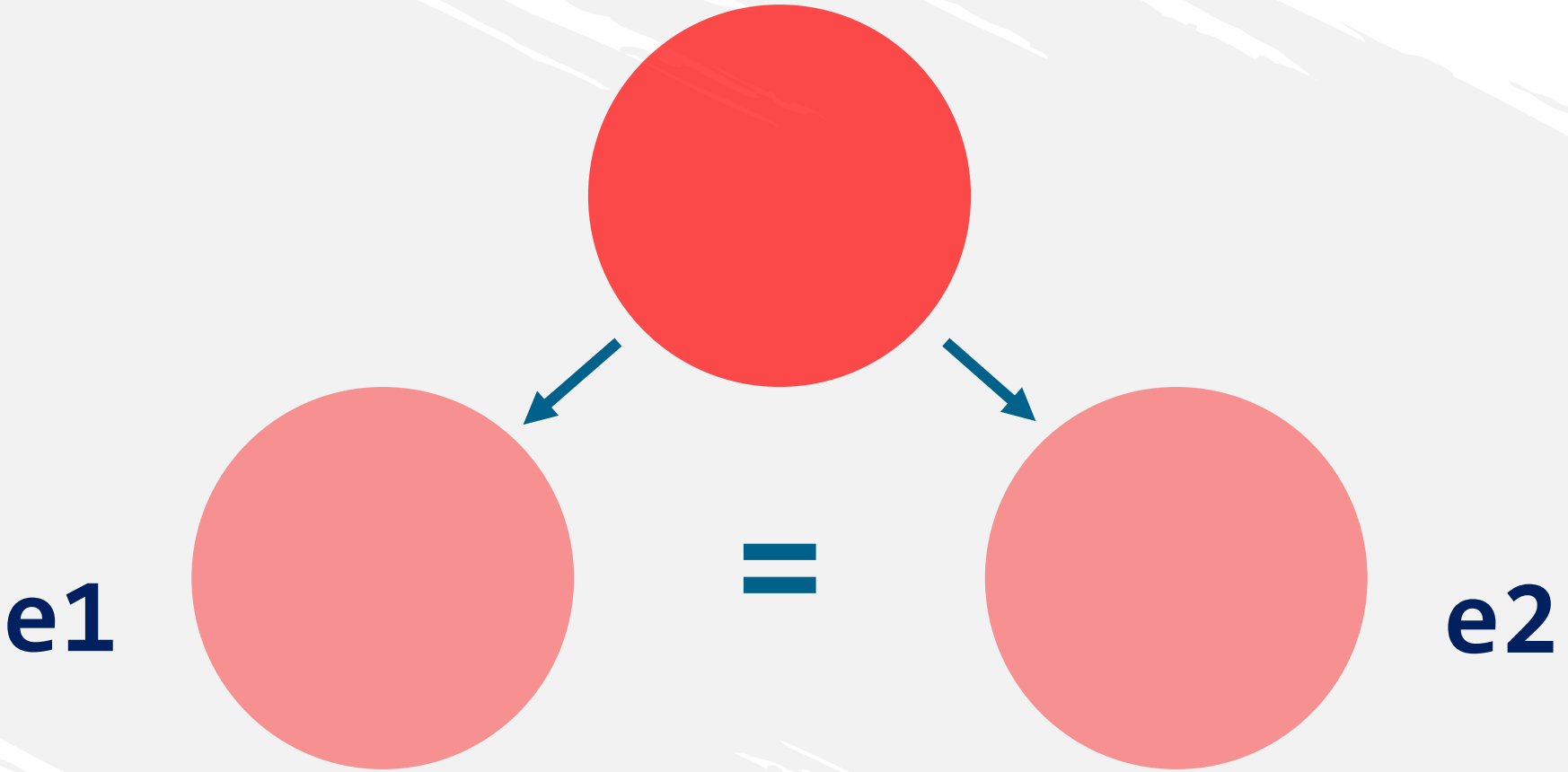

- you can either filter both in the join, or you can filter one of them in the WHERE clause, and the other one – in the join

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