SQL Week 3

Watch video: https://youtu.be/gcYKGV-QKB0?t=1h21m40s

Topics List

- JOIN

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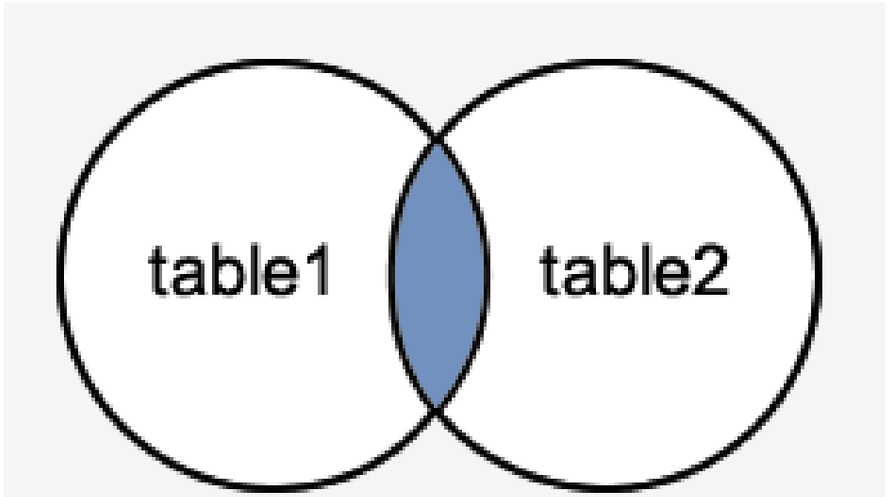
Join

- A SQL join is an instruction to combine data from two sets of data (i.e. two tables)



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Join

- The **JOIN** keyword selects all rows from both tables if there is a match between the *join* columns in both tables (i.e. Primary Key - Foreign Key link).

```
SELECT column_name(s)
FROM table1
JOIN table2
ON table1.column_name=table2.column_name;
```

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- The following example selects each copyId from the *bookCopy* table and selects the corresponding (matching) book title from the book table:

```
select copyId, title
from book join bookcopy
on book.isbn=bookcopy.isbn;
```

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- An alternative way to write the statement is to use the NATURAL JOIN. This allows you to omit the ON clause but the *join* columns must have the same name.

```
select copyId, title
from book natural join bookcopy;
```

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- In each SELECT statement that requires a JOIN, there are four things to do:
  - Identify which tables have the data you are looking for. These table names are used in the *JOIN* clause.
  - Identify which columns are the primary and foreign keys in these tables. We use these in the *ON* clause.
  - Identify which columns we want the query to output. We put these in the *SELECT* clause of the statement.
  - Add any conditions necessary (if there are any).