SQL - 2

Sunday, October 5, 2025 10:40 AM

⇒ Group By
⇒ Joins
⇒ Sub queries

GroupBy

→ It is used to retrieve the rows and group them based on a certain attributes.

→ [Select] statement

→ It is used to do some sort of aggregation

→ all the columns that we write in select statement must also come in group by

```
Select C1, C2, C3 from TABLE
Group by [C1, C2, C3]
```

→ [having] is used to filter out the groups]

filters out the rows

→ where filters out s the rows

having filter out the groups

→ having is used only with group by

→ where is used before group by and Having is used After group by

6)

id	salary	name
1	1000	A
2	2000	B
3	1000	C
4	3000	D

(1000 – 2
2000 – 1
3000 – 1)

what are the diff salaries that employees are getting and how many employees are getting a part salary

Aliases are used to rename the columns or table in the query.

Joins for to relate the tables

↓ Orders

↓ Customers

are used when we want to combine multiple tables to get some info

Orders

id	value
10	100
20	200
30	300

1 → 40
2 → 20
3 → 0

Customers

	id	name	age
2 →	1	A	20
1 →	2	B	30
0 →	3	C	40

⇒ to join two tables there should be atleast one column with common values

Types of Joins

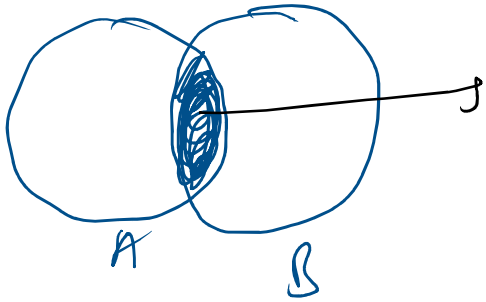
- Inner Join
- Outer Join:
  - Left Join
  - Right Join
  - Full Join

Inner Join (By default)

Inner Join

JOIN

Venn Diagrams

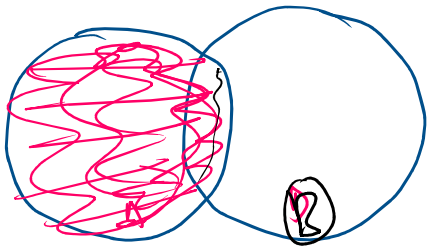


rows which are common in both A and B

- Select C1, C2
  from TABLE1
  Join TABLE2
  ON Table1.C1 = Table2.C2

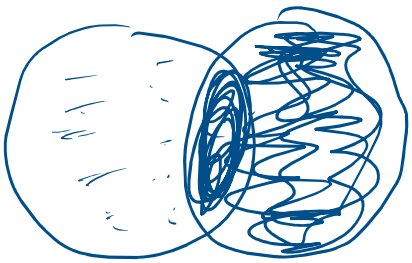
Outer Join

→ Left Join



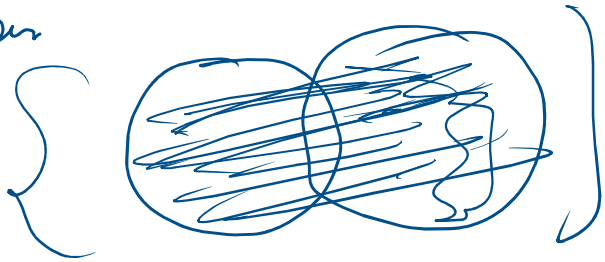
All the records of table1 and common records of both the tables.

Right Join



A B

Full outer Join



Unions

Combine the results

⇒ [Union gives unique rows after combining

union all gives duplicates also]

self Join

```
[Select C1, C2 --
  from table1
  join table1
  ON table1.C1 = table1.C2]
```