

Associating Posts with number of Votes :-

→ We want that whenever we retrieve any post no of votes for that post should automatically be returned with details of that post, without any further request on SQL query.

To achieve this (getting results from multiple tables using single SQL query), we use SQL JOINS

Example of SQL Join :- will show all columns of posts table.

```
SELECT posts.* , email FROM posts LEFT JOIN users ON posts.owner_id = users.id;
```

```
SELECT users.id , count(votes.user_id) FROM users.id = votes.user_id GROUP BY users.id;
```

The group by column, the column viewed alone must be same, else there will be an error.

→ For COUNT() function to run, using GROUP BY is must.

Tip on counting records, to get 0 for "null" values

contains all non-null values,
so, GROUP BY must be done
on the basis of this column
[and viewed alone, without any aggregate function]

<u>id</u>	<u>user_id</u>
9	g
9	g
9	g
8	g
7	8
	[null]

contains null value, so, this column must be passed to COUNT() function

Following above rules, to get count of votes for each post properly (with zeroes), the SQL query will be :-

contains null values

```
SELECT posts.id, COUNT(post_id) FROM posts
LEFT JOIN votes ON posts.id = votes.post_id
GROUP BY posts.id;
```

do not contain null values

thus, the record with corresponding right "null" value will also be in a group, thus, 0 [zeroes] will get counted in the result.