

# MySQL PRAT 2

MySQL Zinglecode

SELECT ++ AS

SQL

```
SELECT title, isnecessary AS is_ncs
FROM product
```

GROUP BY, COUNT(), SUM(), GROUP\_CONCAT()

SQL

# COUNT

```
SELECT is_necessary AS is_ncs, COUNT(id) AS products_count
FROM products
GROUP BY is_necessary;
```

# SUM

```
SELECT is_necessary AS is_ncs, SUM(price) AS products_price
FROM products
GROUP BY is_necessary;
```

# GROUP\_CONCAT, SEPARATOR

```
SELECT title, isnecessary AS is_ncs, GROUP_CONCAT(title SEPARATOR ' + ')
products_titles
FROM products
GROUP BY is_ncs
```

ER Diagram Brief "Link multiple tables"

- One to One

Markdown

```
## product → product_note
## [id] --> [product_id]
```

- One to One Select, INNER JOIN, LEFT JOIN, ON

SQL

```
# INNER
SELECT p.id, p.title, pn.note
FROM products AS p
INNER JOIN product_notes AS pn
ON p.id = pn.product_id
ORDER BY id ASC
```

```
# LEFT
SELECT p.id, p.title, pn.note
FROM products AS p
LEFT JOIN product_notes AS pn
ON p.id = pn.product_id
ORDER BY id ASC
```

- One to Many Create

Markdown

```
## /-> product
## categories -> product
## [id] [category_id]
```

- One to Many Select

SQL

```
select p.id AS id, p.title AS title, c.title AS category
from products AS p
LEFT JOIN categories AS c
ON p.category_id = c.id

# Combo, GROUP BY
SELECT c.id AS id, c.title AS title, COUNT(p.id) AS products_count
FROM categories AS c
LEFT JOIN products AS p
ON c.id = p.category_id
GROUP BY c.id
```

## Many to Many Create

Markdown

```
## product -->> product_hashtags <----- hashtags
## [id] [product_id] [hashtag_id] [id]
```

- Many to Many Select

SQL

```
-- ## product ----->> product_hashtags
SELECT p.id AS id, p.title AS title, COUNT(ph.hashtags_id) AS hashtags_count
FROM products AS p
LEFT JOIN products_hashtags AS ph
ON p.id = ph.product_id
GROUP BY p.id

-- ## Complete
SELECT p.id AS id, p.title AS title, GROUP_CONCAT(ph.title) AS hashtag
FROM products AS p
LEFT JOIN (
    SELECT h1.title AS title, ph1.product_id AS product_id
    FROM products_hashtags AS ph1
    LEFT JOIN hashtags AS h1
    ON ph1.hashtags_id = h1.id
) AS ph
ON p.id = ph.product_id
GROUP BY p.id

-- Other
SELECT h.id AS id, h.title AS title, COUNT(ph.product_id) AS product_count
FROM hashtags AS h
LEFT JOIN products_hashtags AS ph
ON h.id = ph.hashtags_id
GROUP BY h.title
```

On Update On Delete

CASCADE ::: If you delete the connected one, it will be deleted too.

SET NULL ::: If you delete the connected one, it will just NULL.