



# BASIC SQL

SQL Grundlagen

## SELECT STATEMENT

### SELECTING COLUMNS

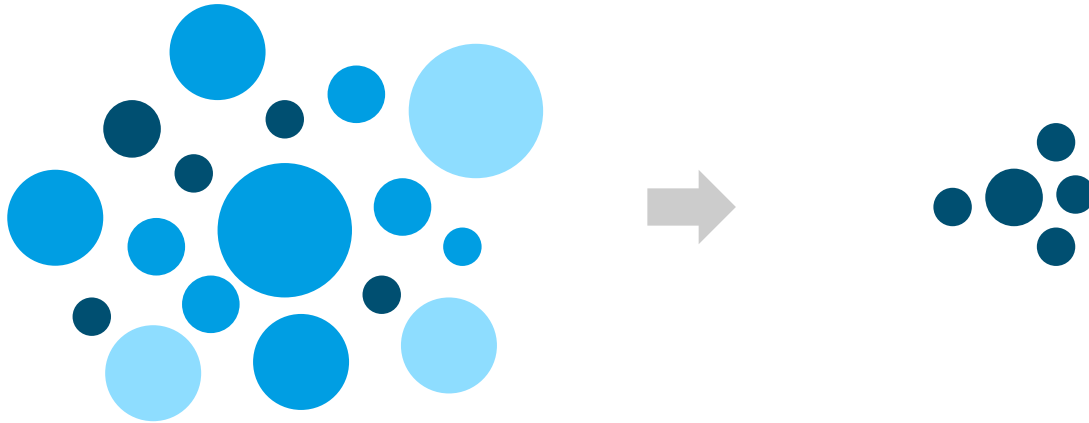
---

**SELECT** \* **FROM** <table>

**SELECT** <columns> **FROM** <table>

```
SELECT <columns> FROM <table>  
WHERE <condition(s)>
```

```
SELECT * FROM circles  
WHERE color = "●"
```



```
SELECT count(<column>)  
FROM <table>
```

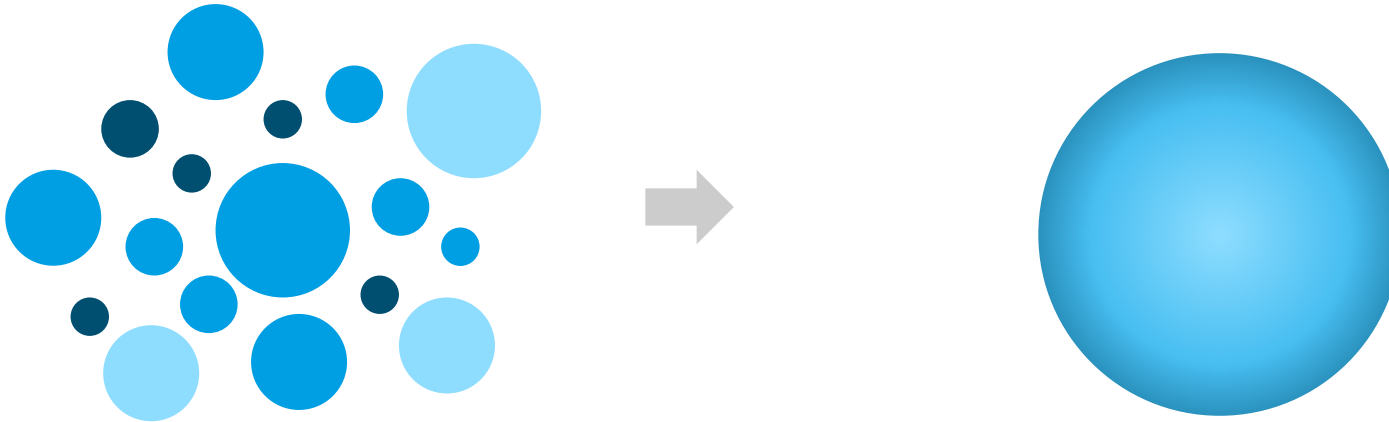
```
SELECT avg(<column>)  
FROM <table>
```

## AGGREGATE ROWS

### SIMPLE AGGREGATION EXAMPLE

---

```
SELECT sum(size) FROM circles
```



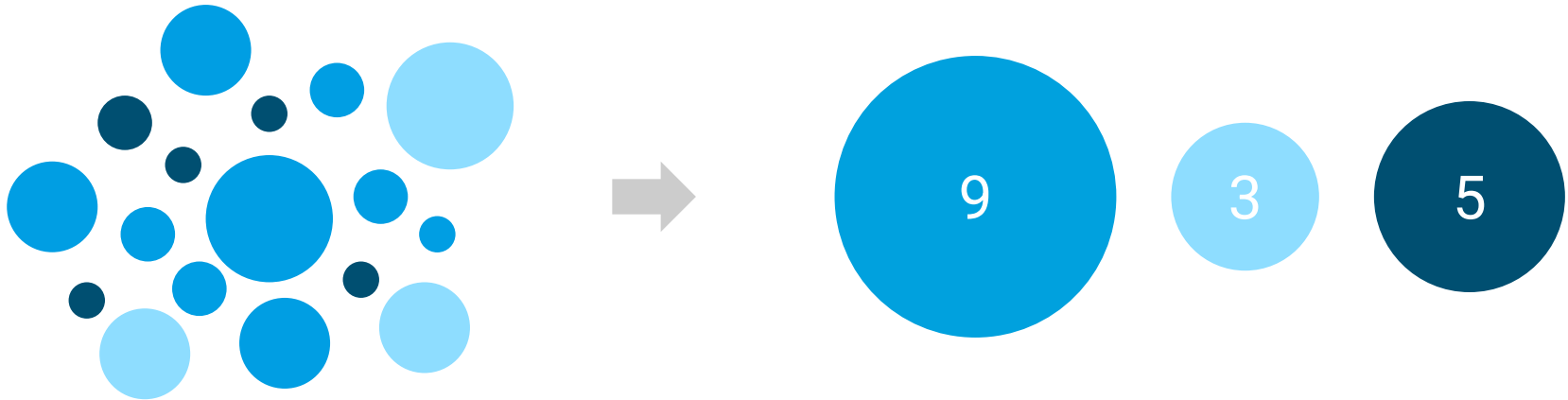
```
SELECT count(<column1>), <column2>  
FROM <table>  
GROUP BY <column2>
```

## AGGREGATE ROWS

### GROUPING EXAMPLE

---

```
SELECT count(*), color FROM circles  
GROUP BY color
```





## **SORT ROWS**

### **SORT BY COLUMN**

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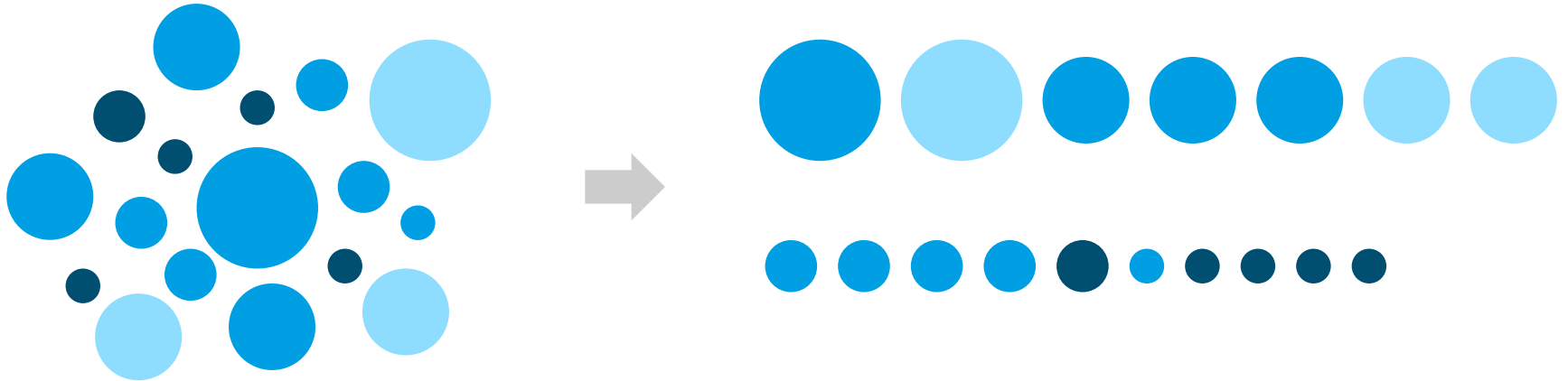
```
SELECT <column1>, <column2>  
FROM <table>  
ORDER BY <column1> DESC
```

## SORT ROWS

### SORT BY COLUMN EXAMPLE

---

```
SELECT * FROM circles  
ORDER BY size DESC
```



## **SORT ROWS**

SORT BY AGGREGATE VALUE

---

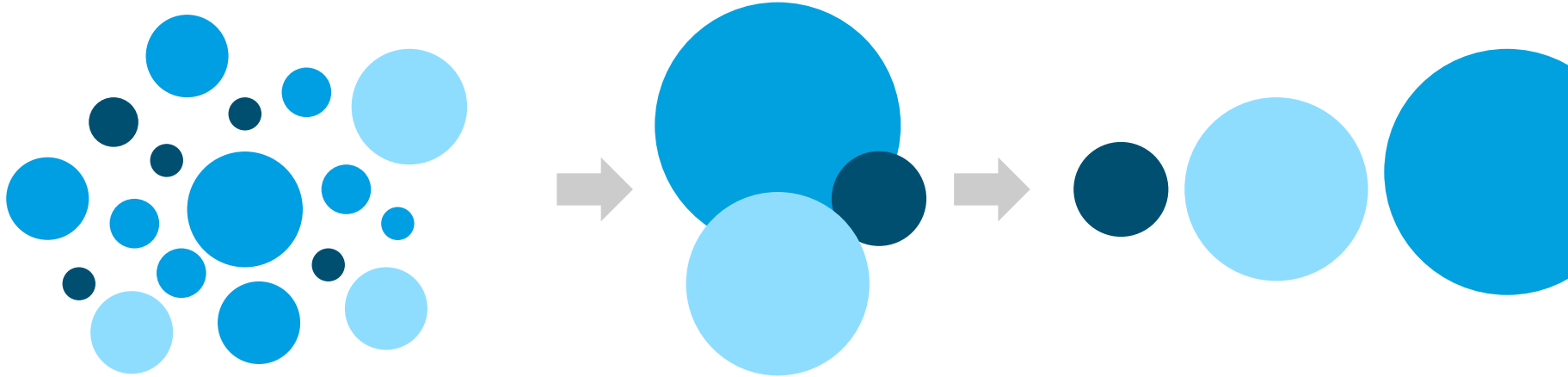
```
SELECT sum(<column1>), <column2>  
FROM <table>  
GROUP BY <column2>  
ORDER BY sum(<column1>) DESC
```

## SORT ROWS

### SORT BY AGGREGATE EXAMPLE

---

```
SELECT sum(size), color FROM circles  
GROUP BY color  
ORDER BY sum(size) ASC
```



## FILTER AGGREGATED ROWS

### HAVING CLAUSE

---

```
SELECT count(<column1>), <column2>  
FROM <table>  
GROUP BY <column2>  
HAVING <condition(s)>
```

## FILTER AGGREGATED ROWS

### HAVING EXAMPLE

---

```
SELECT count(*), color FROM circles  
GROUP BY color  
HAVING count(*) > 3
```

