



BASIC SQL

SQL Grundlagen

SELECT STATEMENT

SELECTING COLUMNS

```
SELECT * FROM <table>
```

```
SELECT <columns> FROM <table>
```

FILTER ROWS

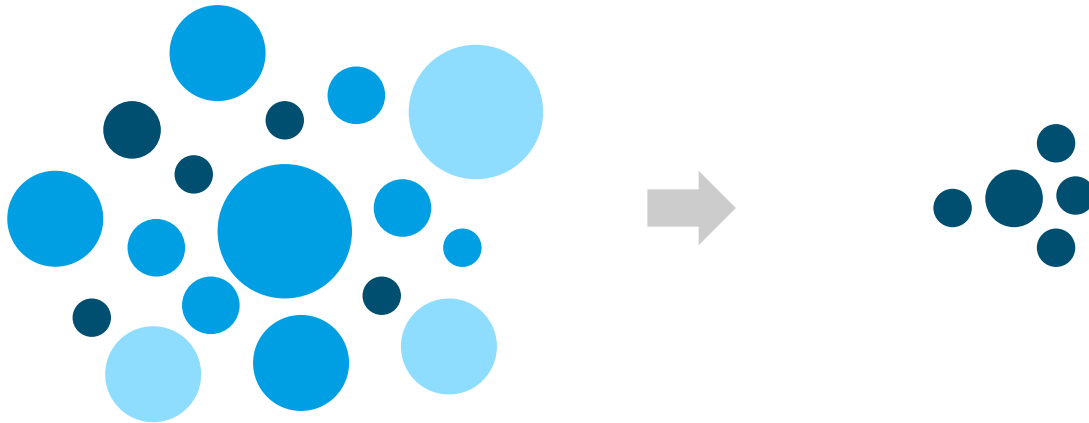
WHERE CLAUSE

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

FILTER ROWS

EXAMPLE

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



AGGREGATE ROWS

SIMPLE AGGREGATION

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

```
FROM <table>
```

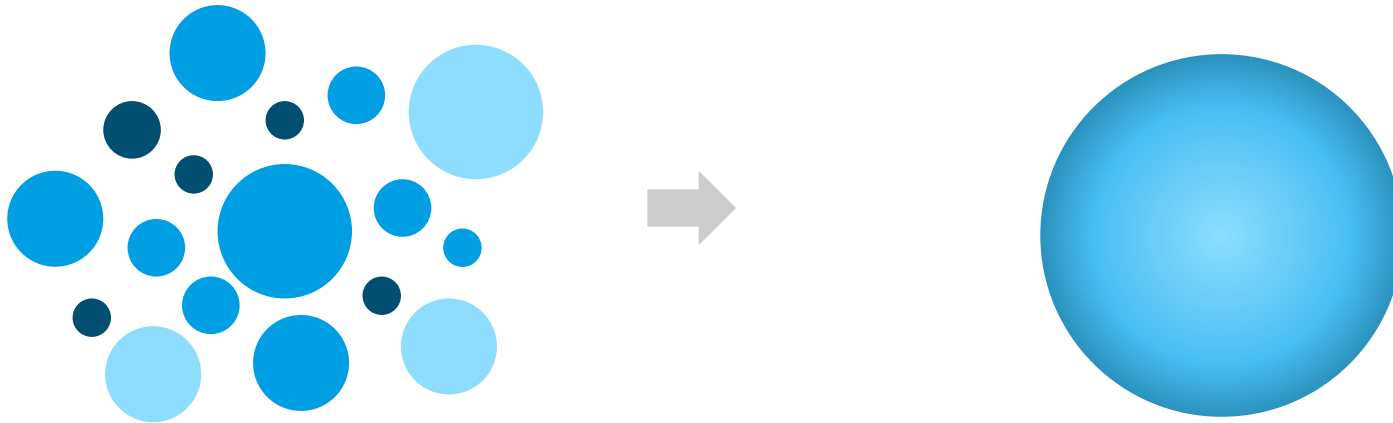
```
SELECT avg(<column>)
```

```
FROM <table>
```

AGGREGATE ROWS

SIMPLE AGGREGATION EXAMPLE

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



AGGREGATE ROWS

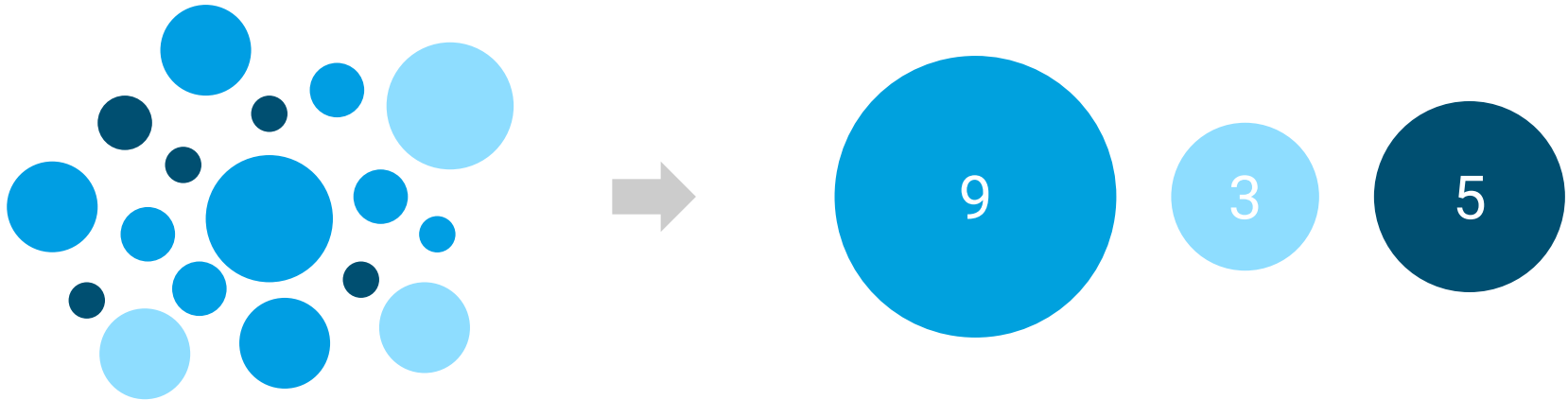
GROUPING

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

AGGREGATE ROWS

GROUPING EXAMPLE

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



SORT ROWS

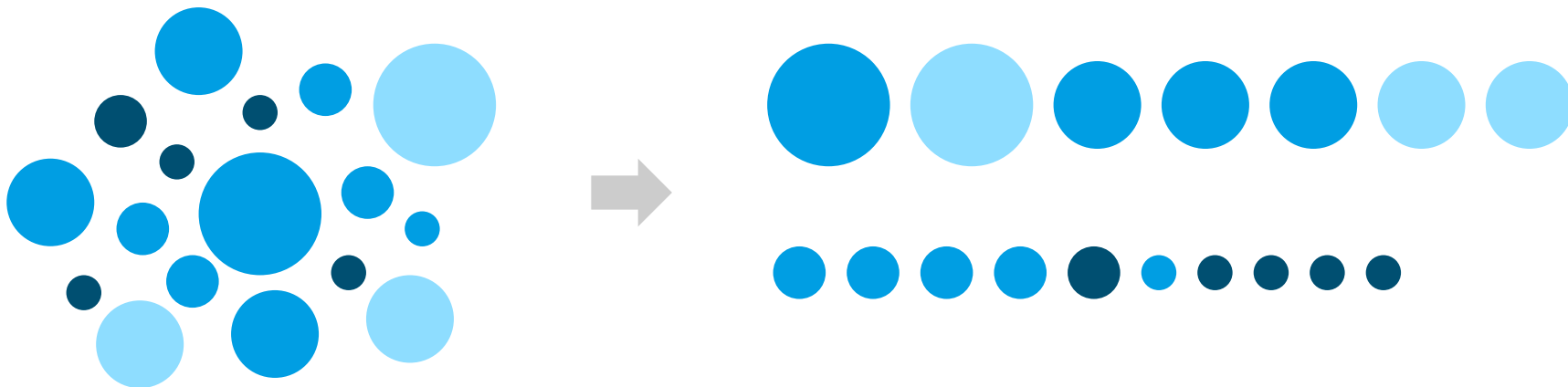
SORT BY COLUMN

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

SORT ROWS

SORT BY COLUMN EXAMPLE

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



SORT ROWS

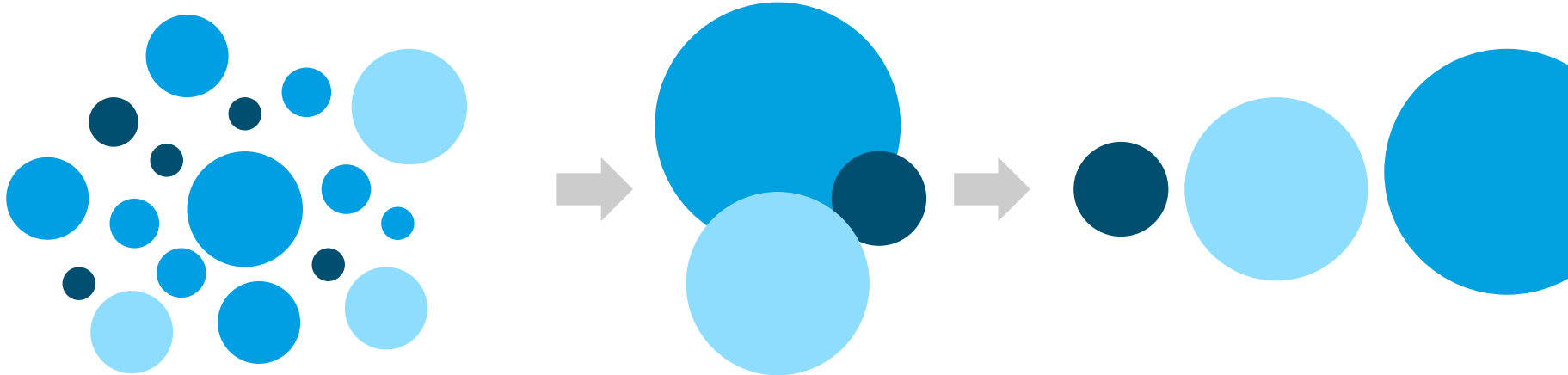
SORT BY AGGREGATE VALUE

```
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
```

