

## SQL JOINS

- **INNER JOIN** - returns records that have matching values in both tables
- **LEFT JOIN** - returns all records from the left table (table1), and the matched records from the right table (table2)
- **RIGHT JOIN** - returns all records from the right table (table2), and the matched records from the left table (table1)

students

id	fname	age	class_id	created_at
1	Olivia	24	1	XXXX-XX-XX
2	Omar	26	1	XXXX-XX-XX
3	Karin	29	1	XXXX-XX-XX
4	Egil	35	1	XXXX-XX-XX
5	Harald	44	3	XXXX-XX-XX
6	Fredrik	33	3	XXXX-XX-XX
7	Sofie	18		XXXX-XX-XX

classes

id	class
1	FED24
2	FED25
3	FSU24

# INNER JOIN

## Syntax

```
SELECT column_name,column_name
    FROM table_name1;
INNER JOIN table_name2
    ON table_name1.column_name = table_name2.column_name
```

```
SELECT column_name,column_name
    FROM table_name1 AS t1;
INNER JOIN table_name2 AS t2
    ON t1.column_name = t2.column_name
```

## Example

**Hämtar alla studenter som går i en klass (UTAN alias tabellnamn)**

```
SELECT *
    FROM classes
INNER JOIN students
    ON classes.id = students.class_id
```

**Hämtar alla studenter som går i klass FED24 (MED alias tabellnamn)**

```
SELECT *
    FROM classes AS c
INNER JOIN students AS s
    ON c.id = s.class_id
WHERE c.class = "FED24"
```

# LEFT JOIN

## Syntax

```
SELECT column_name,column_name
      FROM table_name1;
LEFT JOIN table_name2
      ON table_name1.column_name = table_name2.column_name
```

```
SELECT column_name,column_name
      FROM table_name1 AS t1;
LEFT JOIN table_name2 AS t2
      ON t1.column_name = t2.column_name
```

## Example

**Hämtar alla klasser och alla studenter som går i en klass**

```
SELECT *
      FROM classes AS c
LEFT JOIN students AS s
      ON c.id = s.class_id
```

# RIGHT JOIN

## Syntax

```
SELECT column_name,column_name
      FROM table_name1;
RIGHT JOIN table_name2
      ON table_name1.column_name = table_name2.column_name
```

```
SELECT column_name,column_name
      FROM table_name1 AS t1;
RIGHT JOIN table_name2 AS t2
      ON t1.column_name = t2.column_name
```

## Example

**Hämtar alla studenter och alla klasser som är länkade till studenter**

```
SELECT *
      FROM classes AS c
RIGHT JOIN students AS s
      ON c.id = s.class_id
```

**Eller läs/laborera direkt i W3Schools sida:**

[SQL Joins](#)

[SQL Inner Join](#)

[SQL Left Join](#)

[SQL Right Join](#)