

# MySQL



# Revisão

2

- » Introdução a banco de dados, SGBD
- » Teoria MySQL
- » Declaração SELECT / WHERE / ORDER BY / LIMIT
- » ACID e transações

# Consultas Avançadas



# Consultas Avançadas

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1. BETWEEN
2. LIKE
3. Combinações de AND e OR
4. IN
5. NOT e suas combinações

# Between - Sintaxe

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SELECT campos...

FROM tabela

WHERE campo **BETWEEN valor1 and valor2**

# Between - Exemplo

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SELECT \*

FROM movies

WHERE awards **BETWEEN 1 AND 5**

# Like - Sintaxe

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SELECT campos...

FROM tabela

WHERE

campo **LIKE** '%valo%'

# Like - Exemplo

8

SELECT \*

FROM movies

WHERE

title **LIKE** '%star%'



# Combinando AND e OR

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SELECT campos...

FROM tabela

WHERE

campo1 LIKE '%de%'

**OR** campo1 LIKE '%ll%'

**AND** campo2 LIKE '%a%'

SELECT campos...

FROM tabela

WHERE

(campo1 LIKE '%de%'

**OR** campo1 LIKE '%ll%')

**AND** campo2 LIKE '%a%'

# IN - sintaxe

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SELECT campos...

FROM tabela

WHERE

campo1 = valor1 OR

campo1 = valor2 OR

campo1= valorn

SELECT campos...

FROM tabela

WHERE

campo1 **IN** (valor1, valor2,  
... valorn)

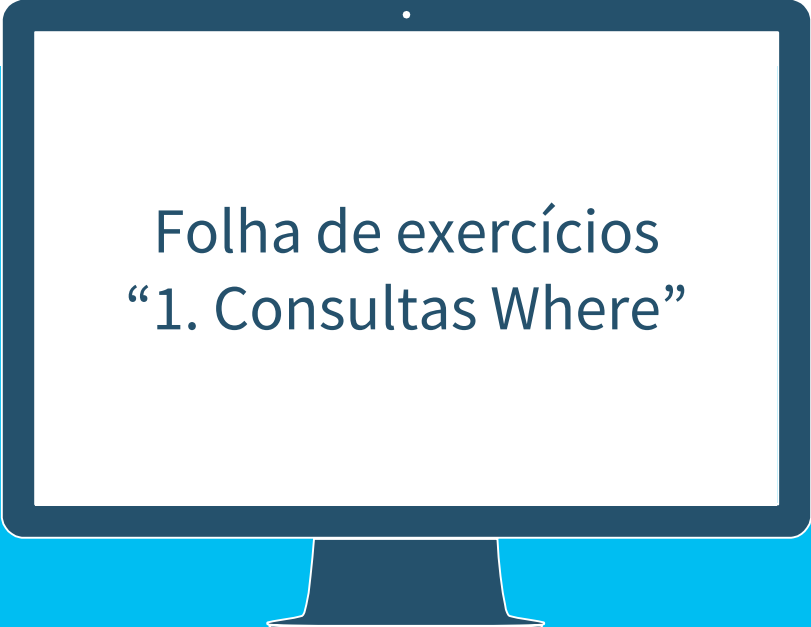
Vamos importar  
um banco de  
dados para  
começar a  
trabalhar com as  
consultas.



Usando  
MySQL  
Workbench

Vamos executar  
declarações

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Folha de exercícios  
“1. Consultas Where”

# Alias



**Mas, pra quê serve  
isso???**

1. Campos:
  - a. Retornar outro nome.
  - b. Usar espaços.
2. Tabelas:
  - a. Simplificar o nome da tabela.
  - b. Invocar mais de uma vez a mesma tabela.
3. Funções: Dar nome ao resultado

# As - sintaxe

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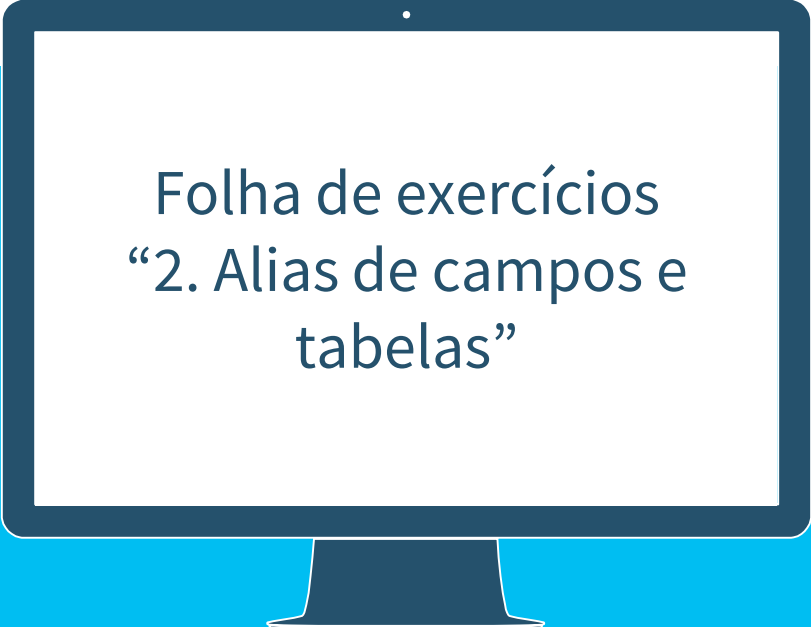
```
SELECT title AS nome  
FROM movies AS filme;
```

```
SELECT concat(title, ' (', year(release_date), ')') AS  
meu_filme  
FROM movies;
```

mi_pelicula
Avatar (2010)
Titanic (1997)
La Guerra de las galaxias: Episodio VI (2004)
La Guerra de las galaxias: Episodio VII (2003)
Parque Jurasico (1999)



Vamos executar  
declarações



Folha de exercícios  
“2. Alias de campos e  
tabelas”

**Chaves primárias**  
**Chaves estrangeiras**

# Chaves primárias

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# Chaves primárias (Primary Key PK)

- » Identificação única de cada registro.
- » Composto por um ou vários campos.
- » Costuma ser chamado de “id”.
- » Exemplos.

# Chaves primárias (Primary Key PK)

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movies .  
 id  
title  
rating  
awards  
release\_date  
length  
genre\_id

genres .  
 id  
name  
ranking  
active  
created\_at

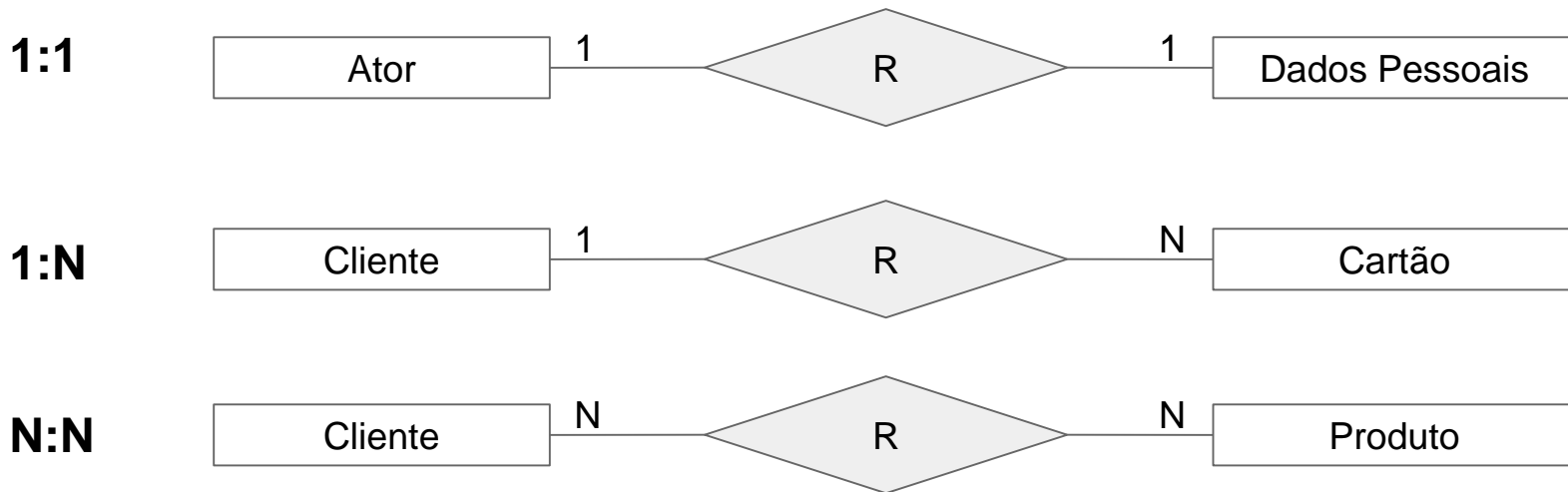
# Chaves estrangeiras

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# Relacionamentos

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Número de entidades com as quais outra entidade pode se associar através de relacionamentos.



## Chaves Estrangeiras (Foreign Keys FK)

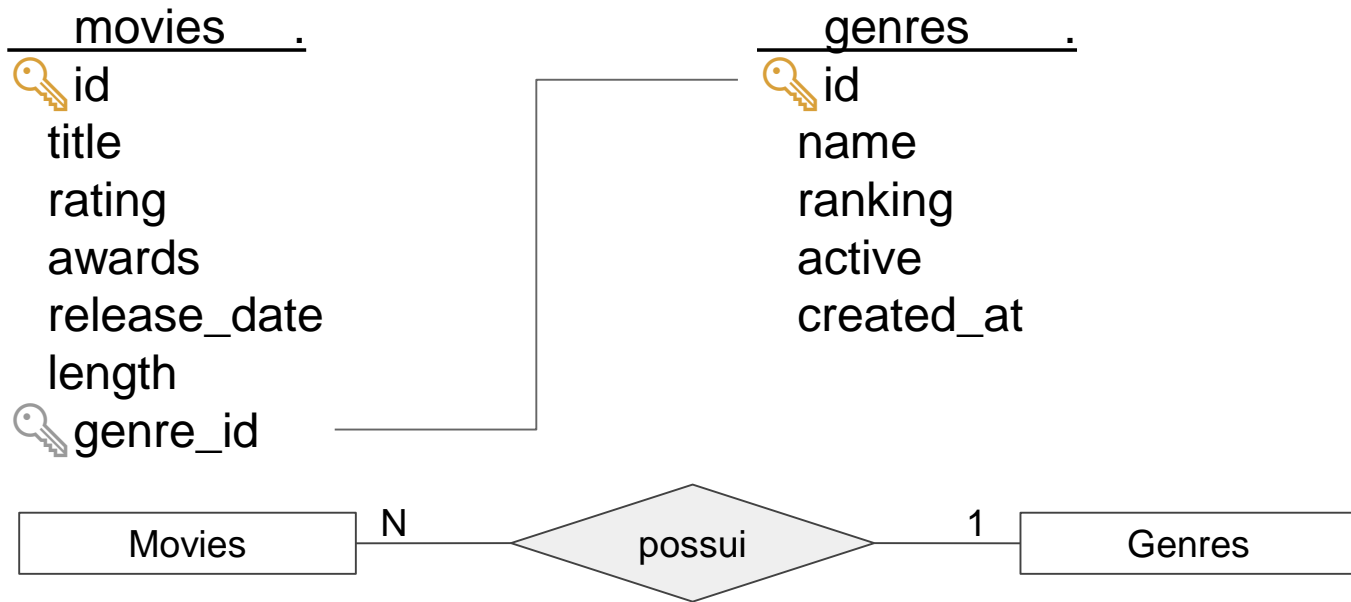
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- » Referência entre tabelas.
- » Composto por um ou vários campos.
- » Faz referência ao campo “id” da tabela consultada.
- » Pode ser nulo (completamente)
- » Exemplos.



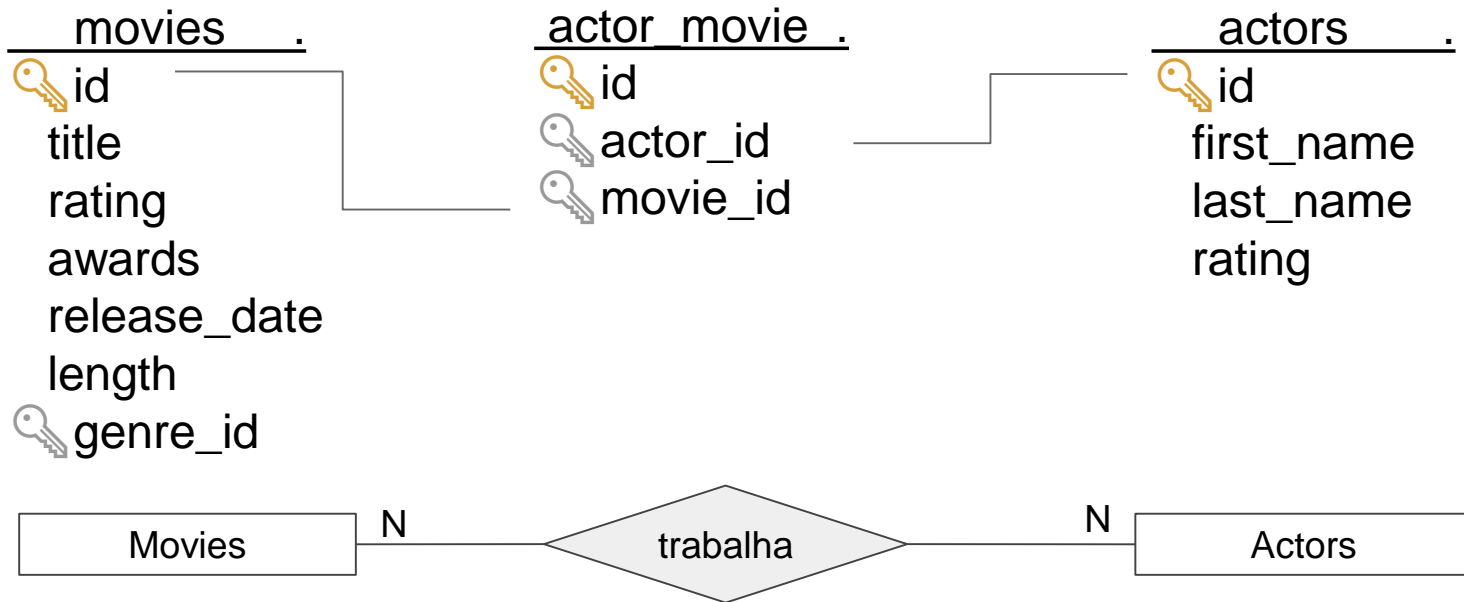
# Chaves Estrangeiras (Foreign Keys FK)

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# Chaves Estrangeiras (Foreign Keys FK)

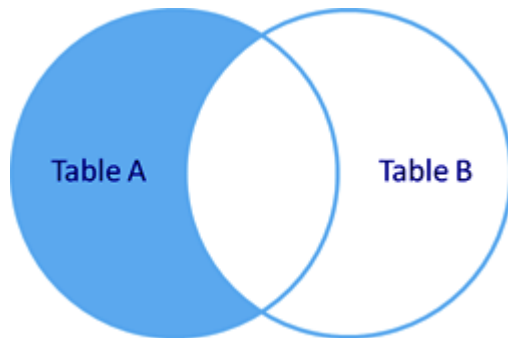
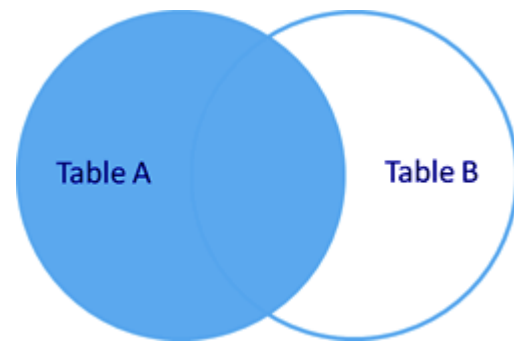
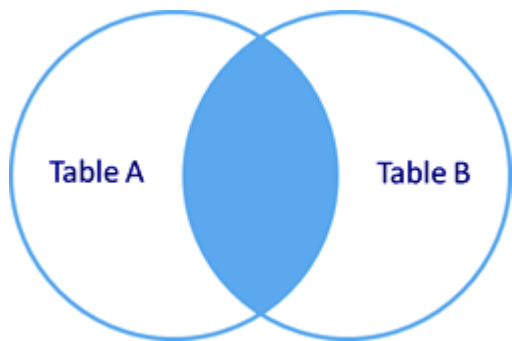
26



# Combinações em SELECT

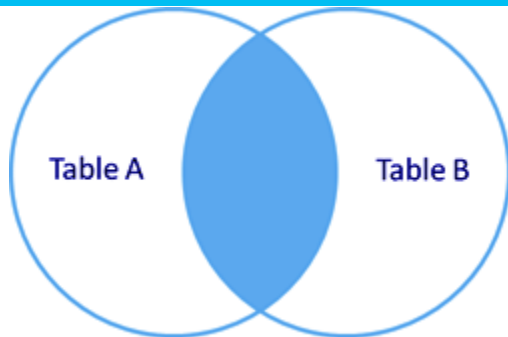
# O que combinamos?

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# Table Reference

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```
SELECT campos  
FROM tabelaA t1, tabelaB t2, [... tabelaC t3, tabelan tn]  
WHERE t1.campo = t2.campo [... and t3.campo=tn.campo]
```

# Table Reference

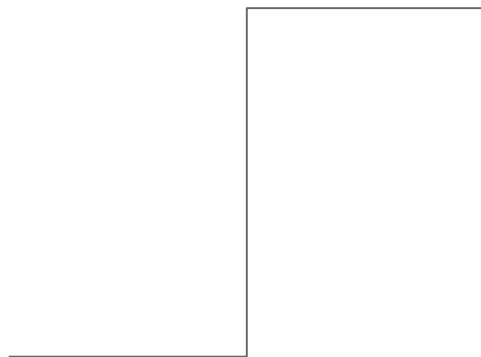
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movies.

id  
title  
rating  
awards  
release\_date  
length  
genre\_id

genres.

id  
name  
ranking  
active  
created\_at



# Table Reference - sintaxe

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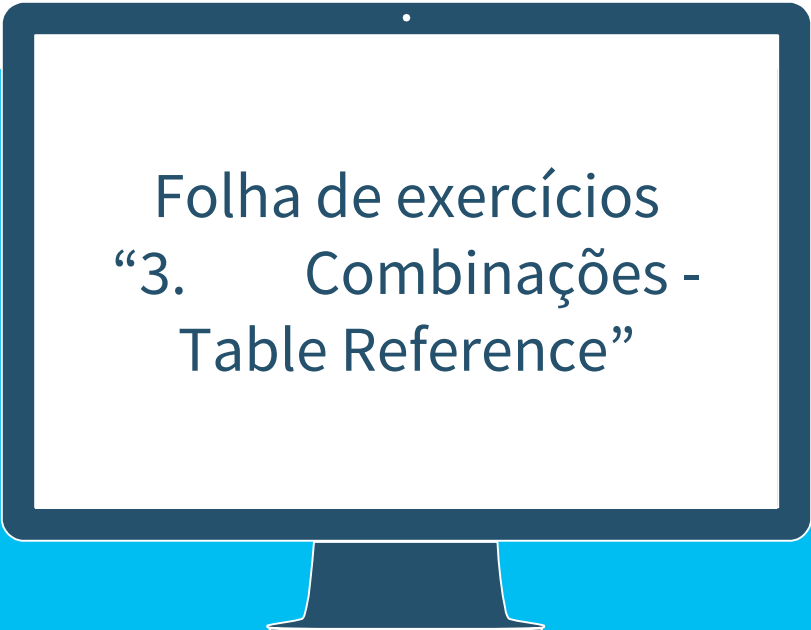
```
SELECT t1.*, t2.name
```

```
FROM movies AS t1, genres AS t2
```

```
WHERE t1.genre_id = t2.id;
```

Vamos executar  
declarações

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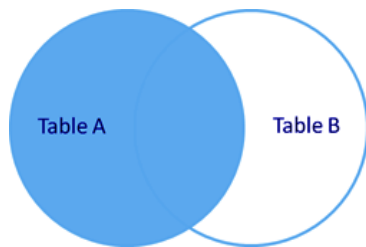
Folha de exercícios  
“3. Combinações -  
Table Reference”



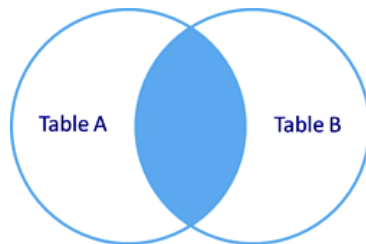
# JOINS

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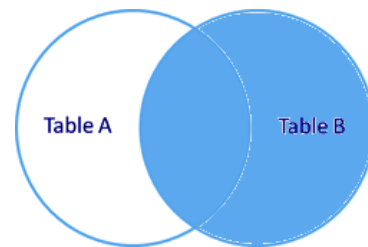
**LEFT**



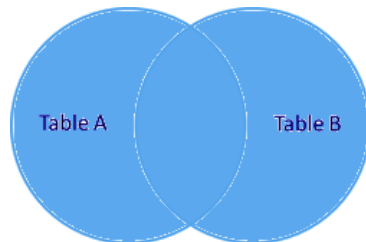
**INNER**



**RIGHT**



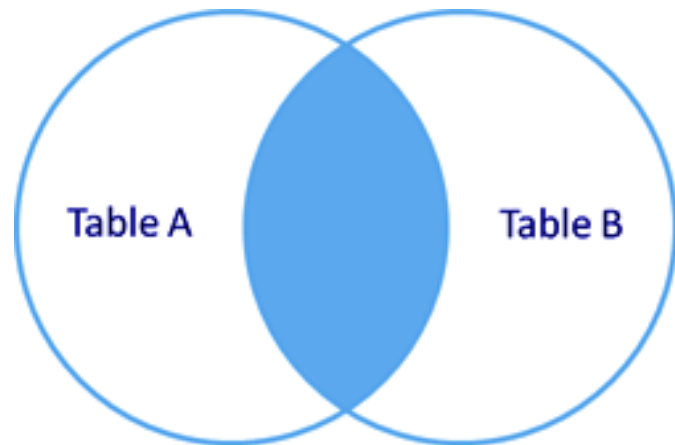
**FULL**



# INNER JOIN

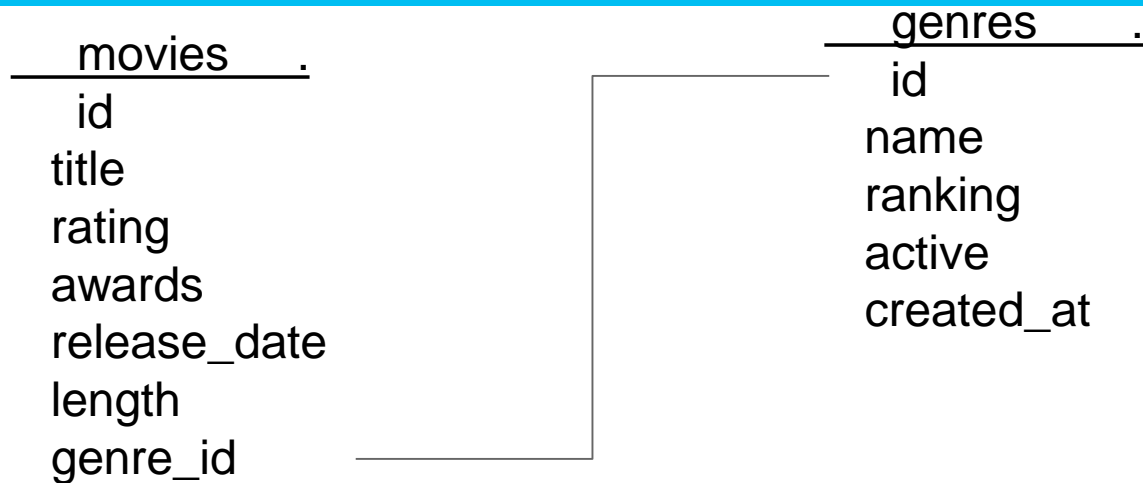
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```
SELECT campos  
FROM tabelaA t1  
INNER JOIN tabelaB t2  
on t1.campo1 = t2.campo2  
[using (campo)]
```



# INNER JOIN

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# Inner Join - exemplo

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```
SELECT t1.*, t2.name
```

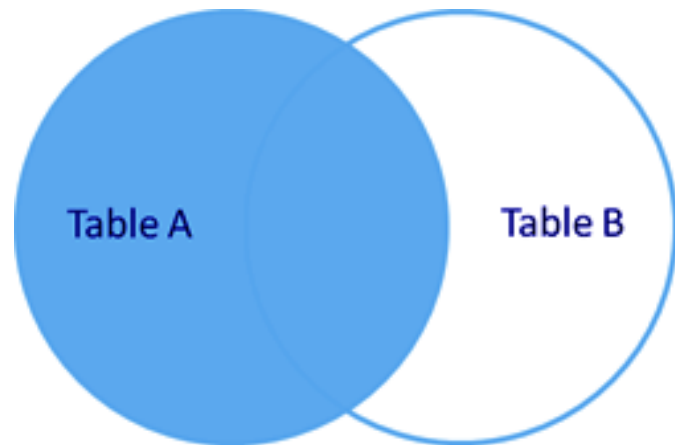
```
FROM movies AS t1
```

```
INNER JOIN genres AS t2 ON t1.genre_id = t2.id;
```

# LEFT JOIN

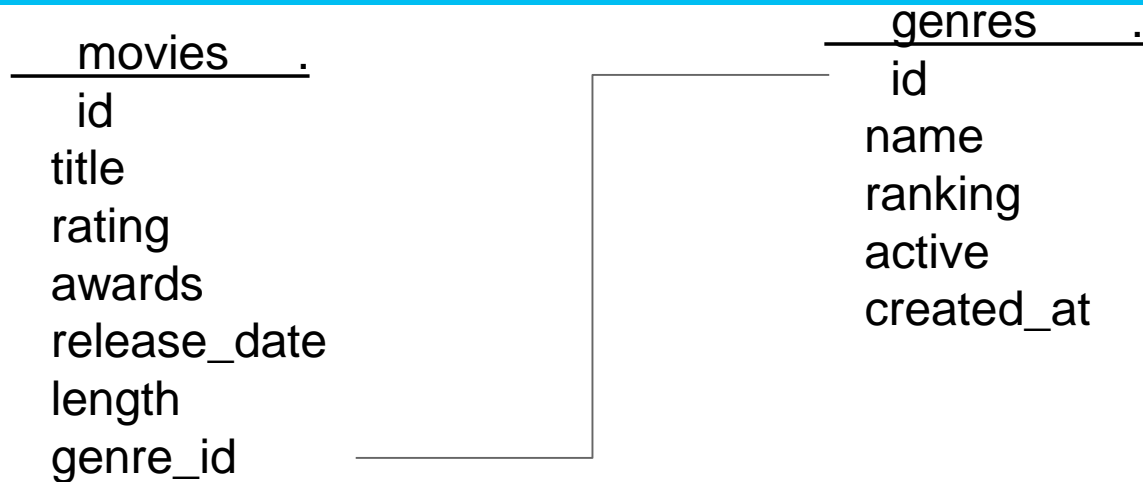
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```
SELECT campos  
FROM tabelaA t1  
LEFT JOIN tabelaB t2  
ON t1.campo1 = t2.campo2  
[using (campo)]
```



# LEFT JOIN

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# Left Join - exemplo

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```
SELECT t1.*, t2.name
```

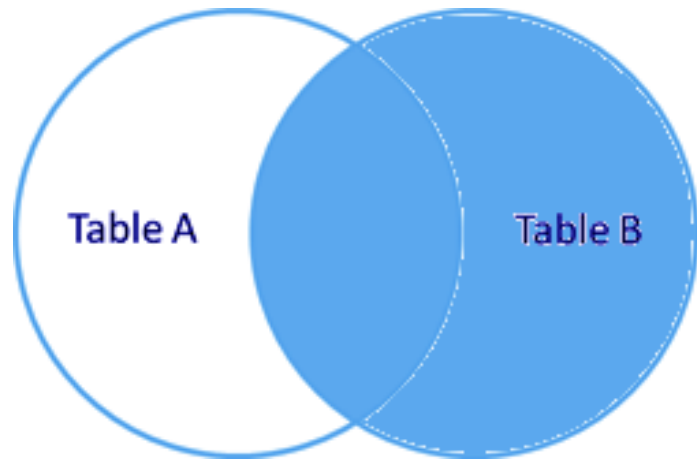
```
FROM movies as t1
```

```
LEFT JOIN genres AS t2 ON t1.genre_id = t2.id;
```

# RIGHT JOIN

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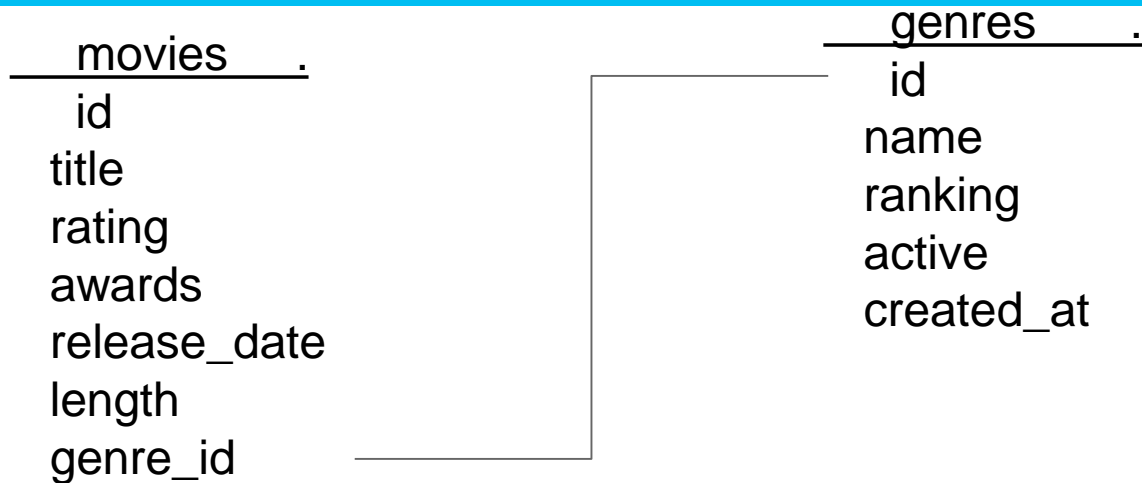
```
SELECT campos  
FROM tabelaA t1  
RIGHT JOIN tabelaB t2  
ON t1.campo1 = t2.campo2  
[using (campo)]
```





# RIGHT JOIN

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# RIGHT JOIN - esempio

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```
SELECT t1.*, t2.name
```

```
FROM movies AS t1
```

```
RIGHT JOIN genres AS t2 ON t1.genre_id = t2.id;
```

Vamos executar  
declarações

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Folha de exercícios  
“4. JOINS”