

Unindo tabelas com UNION

Tabela A	
chave	campo
1	a
2	b
3	c
4	d
5	e
6	f


Tabela B	
chave	campo
1	a
2	b
7	g
8	h
9	i
10	j

UNION

chave	campo
1	a
2	b
3	c
4	d
5	e
6	f
7	g
8	h
9	i
10	j


UNION

```
SELECT m.country, m.ref_year, m.mean_years
FROM men_years_at_school m
UNION
SELECT w.country, w.ref_year, w.mean_years
FROM women_years_at_school w;
```

	 RBC country ▼	123 ref_year ▼	123 mean_years ▼
1	Afghanistan	1,970	0
2	Afghanistan	1,970	0.7
3	Afghanistan	1,971	0.1
4	Afghanistan	1,971	0.7
5	Afghanistan	1,972	0.1
6	Afghanistan	1,972	0.8
7	Afghanistan	1,973	0.1
8	Afghanistan	1,973	0.8
9	Afghanistan	1,974	0.1
10	Afghanistan	1,974	0.8


UNION – um truque para identificar a origem das linhas

```
SELECT m.country, m.ref_year, m.mean_years, 'male' as gender
FROM men_years_at_school m
UNION
SELECT w.country, w.ref_year, w.mean_years, 'female' as gender
FROM women_years_at_school w;
```

	ABC country ▼	123 ref_year ▼	123 mean_years ▼	ABC gender ▼
1	Afghanistan	1,970	0	female
2	Afghanistan	1,970	0.7	male
3	Afghanistan	1,971	0.1	female
4	Afghanistan	1,971	0.7	male
5	Afghanistan	1,972	0.1	female
6	Afghanistan	1,972	0.8	male
7	Afghanistan	1,973	0.1	female
8	Afghanistan	1,973	0.8	male
9	Afghanistan	1,974	0.1	female
10	Afghanistan	1,974	0.8	male


UNION com filtro de linhas

```
SELECT m.country, m.ref_year, m.mean_years, 'male' as gender
FROM men_years_at_school m
WHERE m.country = 'Brazil'
      AND m.ref_year = 2005
UNION
SELECT w.country, w.ref_year, w.mean_years, 'female' as gender
FROM women_years_at_school w
WHERE w.country = 'Brazil'
      AND w.ref_year = 2005;
```

	 ABC country ▼	123 ref_year ▼	123 mean_years ▼	ABC gender ▼
1	Brazil	2,005	6.3	male
2	Brazil	2,005	6.5	female


UNION remove linhas duplicadas


```
SELECT m.country, m.ref_year
FROM men_years_at_school m
WHERE m.country = 'Brazil'
UNION
SELECT w.country, w.ref_year
FROM women_years_at_school w
WHERE w.country = 'Brazil';
```

	 ABC country ▼	123 ref_year ▼
1	Brazil	1,970
2	Brazil	1,971
3	Brazil	1,972
4	Brazil	1,973
5	Brazil	1,974

UNION ALL mantém todas as linhas

```
SELECT m.country, m.ref_year
FROM men_years_at_school m
WHERE m.country = 'Brazil'
UNION ALL
SELECT w.country, w.ref_year
FROM women_years_at_school w
WHERE w.country = 'Brazil';
```

	 ABC country ▼	123 ref_year ▼
1	Brazil	1,970
2	Brazil	1,971
3	Brazil	1,972
4	Brazil	1,973
5	Brazil	1,974

	 ABC country ▼	123 ref_year ▼
41	Brazil	1,970
42	Brazil	1,971
43	Brazil	1,972
44	Brazil	1,973
45	Brazil	1,974

Subtraindo dados com EXCEPT – A menos B

Tabela A	
chave	campo
1	a
2	b
3	c
4	d
5	e
6	f


Tabela B	
chave	campo
1	a
2	b
7	g
8	h
9	i
10	j

A EXCEPT B

chave	campo
3	c
4	d
5	e
6	f

EXCEPT – todos que estão em A mas não estão em B

```
SELECT p.country  
FROM population p  
EXCEPT  
SELECT f.country  
FROM fertility f;
```

	 RBC country ▼
1	Andorra
2	Dominica
3	Holy See
4	Liechtenstein
5	Marshall Islands
6	Monaco
7	Nauru
8	Palau
9	San Marino
10	St. Kitts and Nevis
11	Tuvalu

Subtraindo dados com EXCEPT – B menos A

Tabela A	
chave	campo
1	a
2	b
3	c
4	d
5	e
6	f


Tabela B	
chave	campo
1	a
2	b
7	g
8	h
9	i
10	j

B EXCEPT A

chave	campo
7	g
8	h
9	i
10	j

EXCEPT – todos que estão em B mas não estão em A

```
SELECT f.country
FROM fertility f
EXCEPT
SELECT p.country
FROM population p;
```

 ABC country ▼	
1	Aruba
2	Channel Islands
3	French Guiana
4	French Polynesia
5	Greenland
6	Guadeloupe
7	Guam
8	Macao, China

 ABC country ▼	
9	Martinique
10	Mayotte
11	Netherlands Antilles
12	New Caledonia
13	Puerto Rico
14	Reunion
15	Virgin Islands (U.S.)
16	Western Sahara

Interseção de dados

Tabela A	
chave	campo
1	a
2	b
3	c
4	d
5	e
6	f

Tabela B	
chave	campo
1	a
2	b
7	g
8	h
9	i
10	j

UNION

chave	campo
1	a
2	b

| INTERSECT, linhas que estão em A e em B

```
SELECT p.country  
FROM population p  
INTERSECT  
SELECT f.country  
FROM fertility f;
```

	 ABC country ▼
1	Afghanistan
2	Albania
3	Algeria
4	Angola
5	Antigua and Barbuda
6	Argentina
7	Armenia
8	Australia
9	Austria
10	Azerbaijan





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