

pgAdmin 4

File Object Tools Edit View Window Help

Welcome × postgres/postgres@bigdata\* ×

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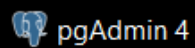
Query Query History

```
1 CREATE TABLE employee
2 (name TEXT PRIMARY KEY, certifications TEXT[]);
```

Data Output Messages Notifications

ERROR: relação "employee" já existe

ERROR: relação "employee" já existe  
SQL state: 42P07



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Query Query History



```
1 SELECT * FROM employee;
```

Data Output   Messages   Notifications



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9

QL

Showing rows: 1 to 1



Page No:


1


of 1



	name [PK] text	certifications text[]
1	Bill	{CCNA,ACSP,CISSP}


```
2 SELECT name
3 FROM employee
4 WHERE certifications @> '{ACSP}';
```

Showing rows: 1 to 1  Page No: 1 of 1    

	name [PK] text 
1	Bill

Data Output Messages Notifications

Showing rows: 1 to 1  Page No: 1 of 1    

	certifications 
1	CCNA

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No limit

Query Query History

```
1 -- Expandir array em linhas
2 SELECT unnest(certifications)
3 FROM employee;
```

Data Output Messages Notifications

SQL

Showing rows: 1 to 3

Page No:

1

of 1

	unnest text
1	CCNA
2	ACSP
3	CISSP

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No limit

QueryQuery History

1-- Expandir array mantendo relação com o nome

2SELECT name, unnest(certifications)

3FROM employee;

Data OutputMessagesNotifications

SQL

Showing rows: 1 to 3Page No: 1 of 1

	name [PK] text	unnest text
1	Bill	CCNA
2	Bill	ACSP
3	Bill	CISSP

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No limit

QueryQuery History

1-- Exemplos de agregação com arrays

2SELECT DISTINCT relkind

3FROM pg\_class

4ORDER BY 1;

Data OutputMessagesNotifications

SQL

Showing rows: 1 to 6Page No: 1 of 1

	relkind "char"
1	S
2	c
3	i
4	r
5	t
6	v

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Query Query History Scratch

```
1
2 SELECT array_agg(DISTINCT relkind)
3 FROM pg_class;
```

Data Output Messages Notifications

Showing rows: 1 to 1 Page No: 1 of 1

	array_agg "char"[]
1	{S,c,i,r,t,v}

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Query Query History Scratch Pad ×

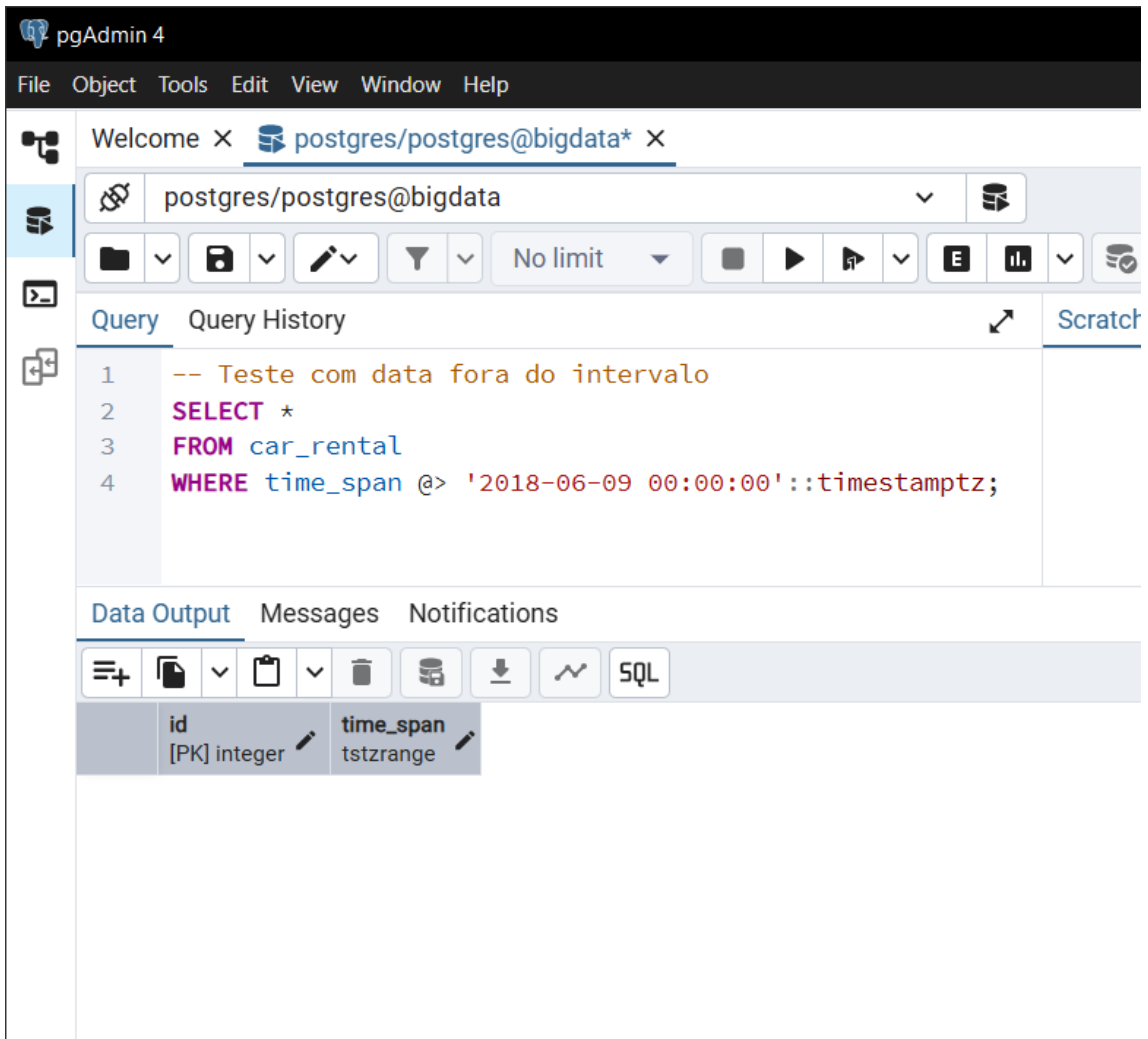
```
1
2 -- Verificar se um momento específico está no intervalo
3 SELECT *
4 FROM car_rental
5 WHERE time_span @> '2016-05-09 00:00:00'::timestampz;
```

Data Output Messages Notifications

Showing rows: 1 to 1 Page No: 1 of 1

	id [PK] integer	time_span tstzrange
1	1	["2016-05-03 09:00:00-03","2016-05-11 12:00:00-03")





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Query Query History Scratch Pad

```
1 -- Buscar rentals que incluem uma data específica
2 SELECT *
3 FROM car_rental
4 WHERE time_span @> '2007-08-01 00:00:00'::timestampz;
```

Data Output Messages Notifications

Showing rows: 1 to 1 Page No: 1 of 1

	id [PK] integer	time_span tstzrange
1	2161	["2007-07-31 01:00:00-03","2007-08-01 01:00:00-03")

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No limit

QueryQuery HistoryScratch Pad >

1SELECT \*  
2FROM dart  
3LIMIT 5;

Data OutputMessagesNotifications

SQL

Showing rows: 1 to 5Page No: 1 of 1

	dartno integer	location point
1	1	(0.2870591792388355,59.746683812785825)
2	2	(5.8388752459940685,19.38980682354994)
3	3	(3.808022342857331,55.94548692816683)
4	4	(43.43686988666591,36.21996363684832)
5	5	(93.5259241283193,30.537147818805764)

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Query Query History Scratch Pad ×

```
1 SELECT *
2 FROM dart
3 WHERE location <@ '<(50, 50), 4>'::circle;
```

Data Output Messages Notifications

Showing rows: 1 to 6 Page No: 1 of 1

	dartno integer	location point
1	636	(49.14712794457792,46.269937366892)
2	85	(53.47448476834806,48.35505013371808)
3	345	(52.08722239746804,49.330861101751196)
4	876	(49.11052475405684,50.58877381580824)
5	154	(48.661332323289926,51.4220721927527)
6	604	(49.58917593476002,51.76487992158245)

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Query Query History Scratch Pad X

```
1 -- Encontrar os 2 dardos mais próximos de um ponto
2 SELECT *
3 FROM dart
4 ORDER BY location <-> '(50, 50)::point
5 LIMIT 2;
```

Data Output Messages Notifications

Showing rows: 1 to 2 Page No: 1 of 1

	dartno integer	location point
1	876	(49.11052475405684,50.58877381580824)
2	604	(49.58917593476002,51.76487992158245)

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Query Query History

```
1 -- Visualizar dados
2 SELECT *
3 FROM friend
4 ORDER BY 1
5 LIMIT 2;
```

Data Output Messages Notifications

	id integer	data json
1	1	{"first_name": "João", "last_name": "Silva", "email": "joao@email.com", "gender": "Male", "ip_address": "192.168.1.1"}
2	2	{"first_name": "Maria", "last_name": "Santos", "email": "maria@email.com", "gender": "Female", "ip_address": "172.16.0.1"}

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No limit

Query Query History

```
1 -- Formatação bonita do JSON
2 SELECT id, jsonb_pretty(data::jsonb)
3 FROM friend
4 ORDER BY 1
5 LIMIT 1;
```

Data Output

	id	integer
1	1	

{  
 "email": "joao@email.com",  
 "gender": "Male",  
 "last\_name": "Silva",  
 "first\_name": "João",  
}

X Cancel

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QueryQuery History

1

-- Extrair campos específicos

2

SELECT data->>'email'

3

FROM friend

4

ORDER BY 1

5

LIMIT 5;

Data OutputMessagesNotifications

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SQL

	?column? text
1	ana@email.com
2	carlos@email.com
3	joao@email.com
4	maria@email.com
5	pedro@email.com

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No limit

Query Query History Scratch

```
1 -- Concatenar campos JSON
2 SELECT data->>'first_name' || ' ' || (data->>'last_name')
3 FROM friend
4 ORDER BY 1
5 LIMIT 5;
```

Data Output Messages Notifications

Showing rows: 1 to 5 Page No: 1 of 1

	?column? text
1	Ana Costa
2	Carlos Banks
3	João Silva
4	Maria Santos
5	Pedro Banks



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No limit

Query Query History Scratch Pad :

```
1 -- Buscar por campo específico
2 SELECT data-->'first_name'
3 FROM friend
4 WHERE data-->'last_name' = 'Banks'
5 ORDER BY 1;
```

Data Output Messages Notifications

Showing rows: 1 to 2 Page No: 1 of 1

	?column? text
1	Carlos
2	Pedro

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No limit

Query Query History

```
1 -- Usar operador de contenção JSON
2 SELECT data->>'first_name'
3 FROM friend
4 WHERE data::jsonb @> '{"last_name" : "Banks"}'
5 ORDER BY 1;
```

Data Output Messages Notifications

Showing rows: 1 to 2 Page No: 1 of 1

	?column? text
1	Carlos
2	Pedro

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No limit

Query

Query History

1

-- Consultas com IP addresses

2

SELECT data->'first\_name' || ' ' || (data->'last\_name'),

3

data->'ip\_address'

4

FROM friend

5

WHERE (data->'ip\_address')::inet <= '172.0.0.0/8'::cidr

6

ORDER BY 1;

Data Output

Messages

Notifications

SQL

Showing rows: 1 to 2  Page No: 1 of 1

	?column? text	?column? text
1	Ana Costa	172.17.0.1
2	Maria Santos	172.16.0.1

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No limit

QueryQuery History

1

-- Agrupamento por gênero

2

SELECT data->>'gender', COUNT(data->>'gender')

3

FROM friend

4

GROUP BY 1

5

ORDER BY 2 DESC;

Data OutputMessagesNotifications

SQL

Showing rows: 1 to 2Page No: 1 of 1

	?column? text	count bigint
1	Male	3
2	Female	2

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No limit

Query Query History

```
1 -- Diferença entre JSON e JSONB
2 SELECT '{"name" : "Jim", "name" : "Andy", "age" : 12} '::json;
3 SELECT '{"name" : "Jim", "name" : "Andy", "age" : 12} '::jsonb;
```

Data Output Messages Notifications

Showing rows: 1 to 1 Page No: 1 of 1

	json	jsonb
1		{"name" : "Jim", "name" : "Andy", "age" : 12}

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Query Query History

```
1 -- Diferença entre JSON e JSONB
2 SELECT '{"name" : "Jim", "name" : "Andy", "age" : 12}':::json;
3 SELECT '{"name" : "Jim", "name" : "Andy", "age" : 12}':::jsonb;
```

Data Output Messages Notifications

Showing rows: 1 to 1 Page No: 1 of 1

	jsonb
1	{"age": 12, "name": "Andy"}

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Query Query History

```
1 SELECT * FROM friend;
```

Data Output Messages Notifications

Showing rows: 1 to 5 Page No: 1 of 1

	id	data
1	1	{"first_name": "João", "last_name": "Silva", "email": "joao@email.com", "gender": "Male", "ip_address": "192.168.1.1"}
2	2	{"first_name": "Maria", "last_name": "Santos", "email": "maria@email.com", "gender": "Female", "ip_address": "172.16.0.1"}
3	3	{"first_name": "Pedro", "last_name": "Banks", "email": "pedro@email.com", "gender": "Male", "ip_address": "10.0.0.1"}
4	4	{"first_name": "Ana", "last_name": "Costa", "email": "ana@email.com", "gender": "Female", "ip_address": "172.17.0.1"}
5	5	{"first_name": "Carlos", "last_name": "Banks", "email": "carlos@email.com", "gender": "Male", "ip_address": "62.212.235.80"}

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No limit

Query Query History

```
1 -- Consultas otimizadas com JSONB
2 SELECT data->>'first_name'
3 FROM friend2
4 WHERE data @> '{"last_name" : "Banks"}'
5 ORDER BY 1;
```

Data Output Messages Notifications

Showing rows: 1 to 2

	?column? text
1	Carlos
2	Pedro

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    No limit  

Query Query History

```
1
2 SELECT *
3 FROM truck_driver;
4
```

Data Output Messages Notifications

      SQL Showing

	id integer	name text	license drivers_license
1	1	Jimbo Biggins	(PA,175319,2017-03-12)



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No limit

QueryQuery History

1-- Acessar campos do tipo composto

2SELECT (license).state

3FROM truck\_driver;

Data OutputMessagesNotifications

SQL

Showing rows: 1

	state character (2)
1	PA

```
1  -- Demostrar busca básica
2  SELECT * FROM fortune WHERE line = 'underdog';
3  SELECT * FROM fortune WHERE line = 'Underdog';
4  SELECT * FROM fortune WHERE lower(line) = 'underdog';
```











 SQL
 Showing rows: 1 to 1  Page No:

	line text
1	underdog

```
1  -- Busca com LIKE
2  SELECT line
3  FROM fortune
4  WHERE line LIKE 'Mop%'
5  ORDER BY 1;
```

	line text	
1	Mop the floor carefully	
2	Mop up the mess quickly	

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No limit

QueryQuery History

1SELECT to\_tsvector('I can hardly wait.');

Data OutputMessagesNotifications

SQL

Showing rows: 1

	to_tsvector	
	tsvector	
1	'can':2 'hardly':3 'i':1 'wait':4	

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No limit

QueryQuery History

1SELECT to\_tsquery('hardly & wait');

Data OutputMessagesNotifications

SQL

Showing rows: 1 to 1

	to_tsquery
1	'hardly' & 'wait'

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No limit

QueryQuery History

12

SELECT to\_tsvector('I can hardly wait.') @@  
to\_tsquery('hardly & wait');

Data OutputMessagesNotifications

SQL

Showing rows: 1

?column?  
boolean

1true

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No limit

Query

Query History

1

-- Busca por similaridade

2

SELECT show\_limit();

Data Output

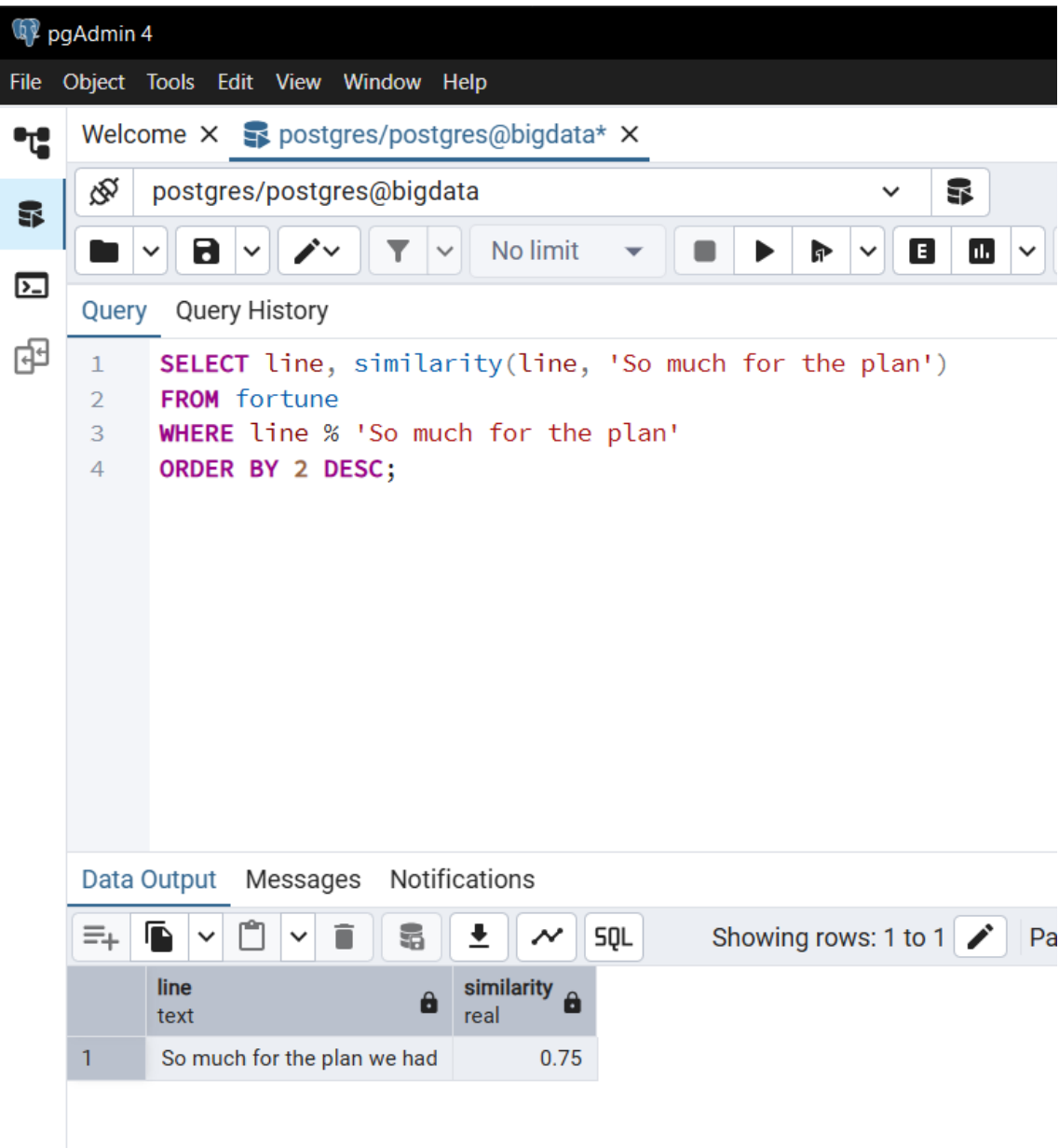
Messages

Notifications

SQL


Showing rows: 1 to 1

	show_limit real
1	0.3





```
1 -- Busca com regex case-insensitive
2 SELECT line
3 FROM fortune
4 WHERE line ~* '(^|[a-z])cat'
5 ORDER BY 1;
```

	line text	
1	Curiosity killed the cat	
2	The cat is out of the bag	
3	The early bird catches the worm	