

## **LAPORAN AKHIR PRAKTIKUM**

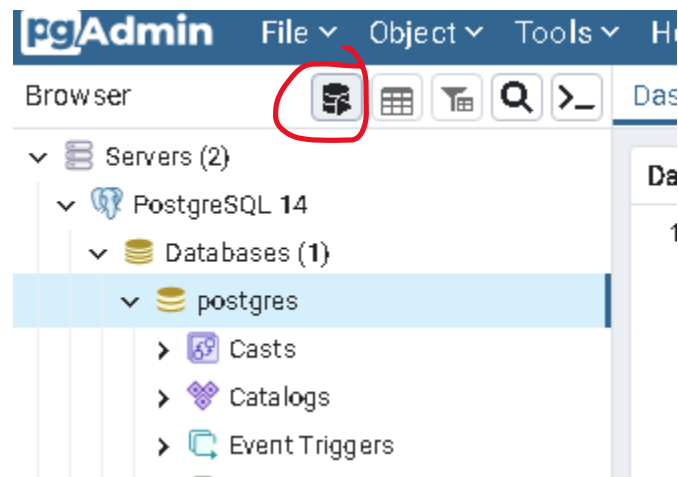
Mata Praktikum : Sistem Basis Data 1  
Kelas : 3IA02  
Praktikum ke- : 7  
Tanggal : 30/11/22  
Materi : Self Join  
NPM : 50420562  
Nama : Ibrahim Bramullah  
Ketua Asisten : Natasya Rahma Fadilla  
Paraf Asisten :  
Nama Asisten :  
Jumlah Lembar : 7 Lembar

**LABORATORIUM TEKNIK INFORMATIKA**

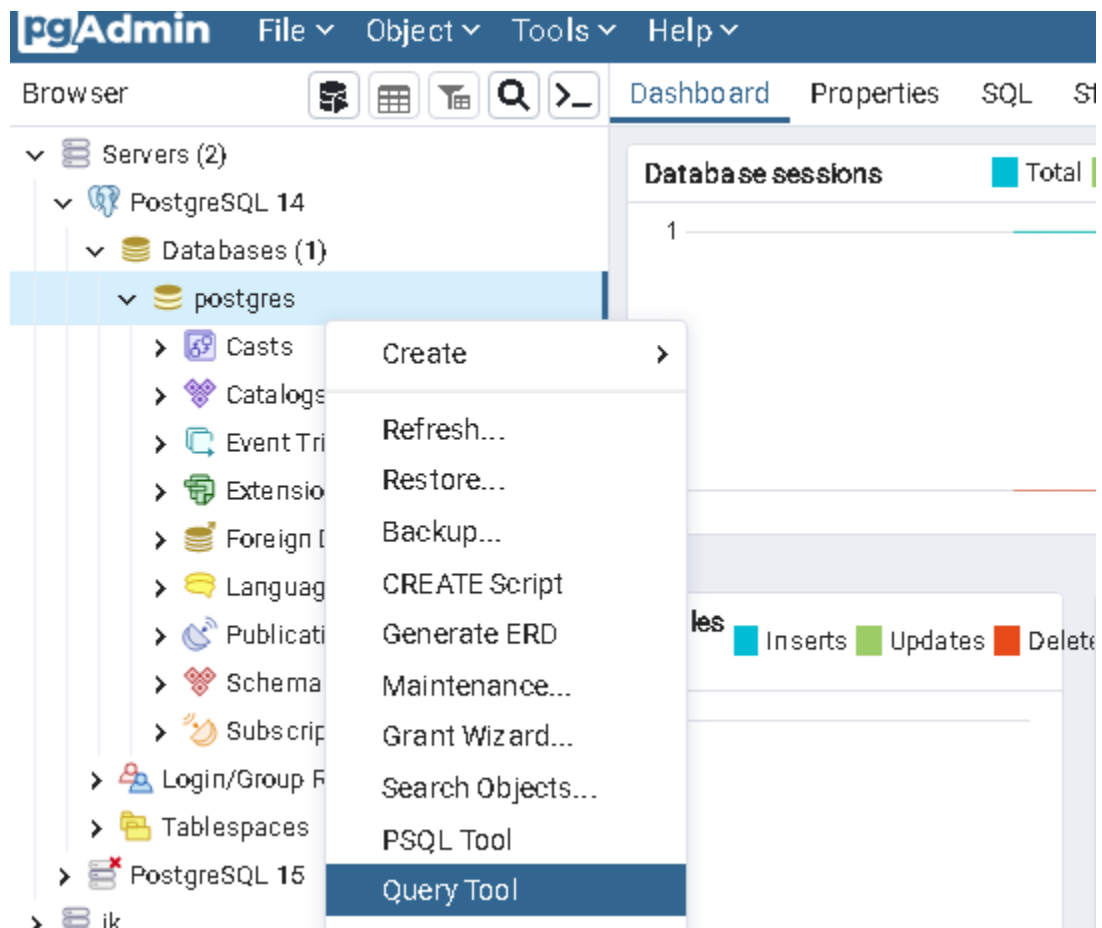
**UNIVERSITAS GUNADARMA**

**2022**

Buka Query Tool

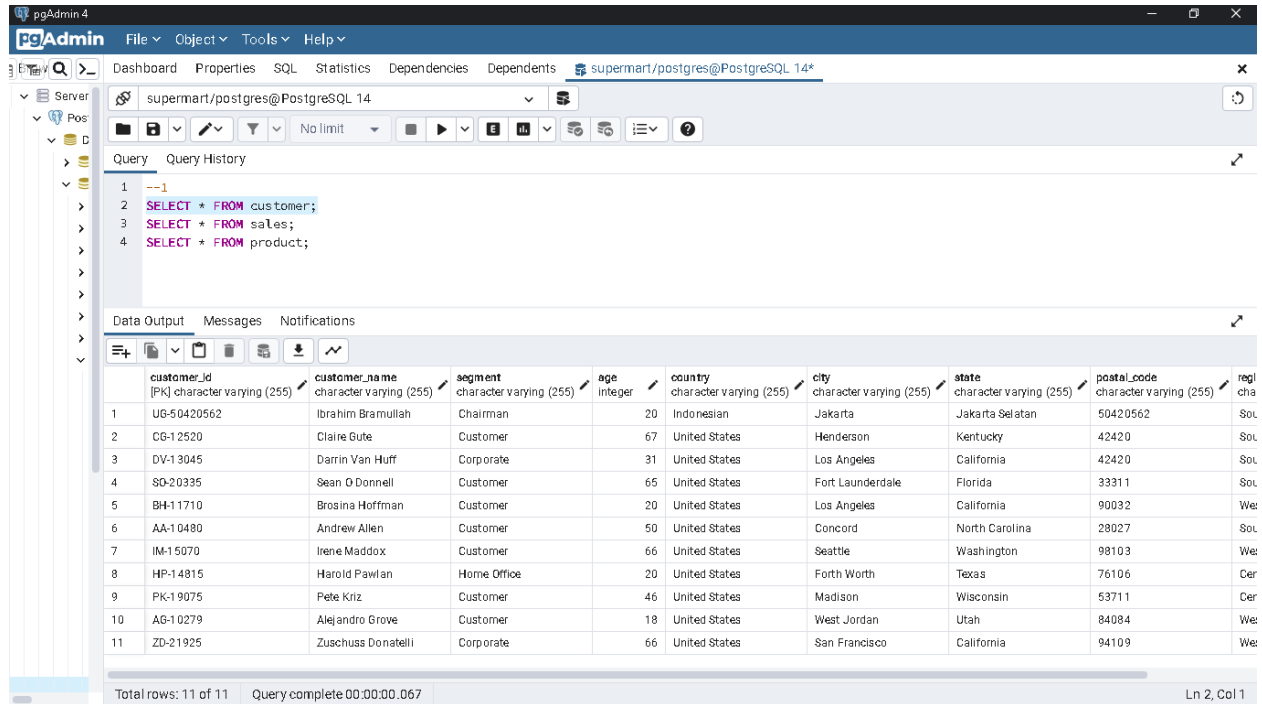


Atau dengan



1. Tampilkan table customer,sales, dan product yang telah dibuat pada database supermart.

## Customer:

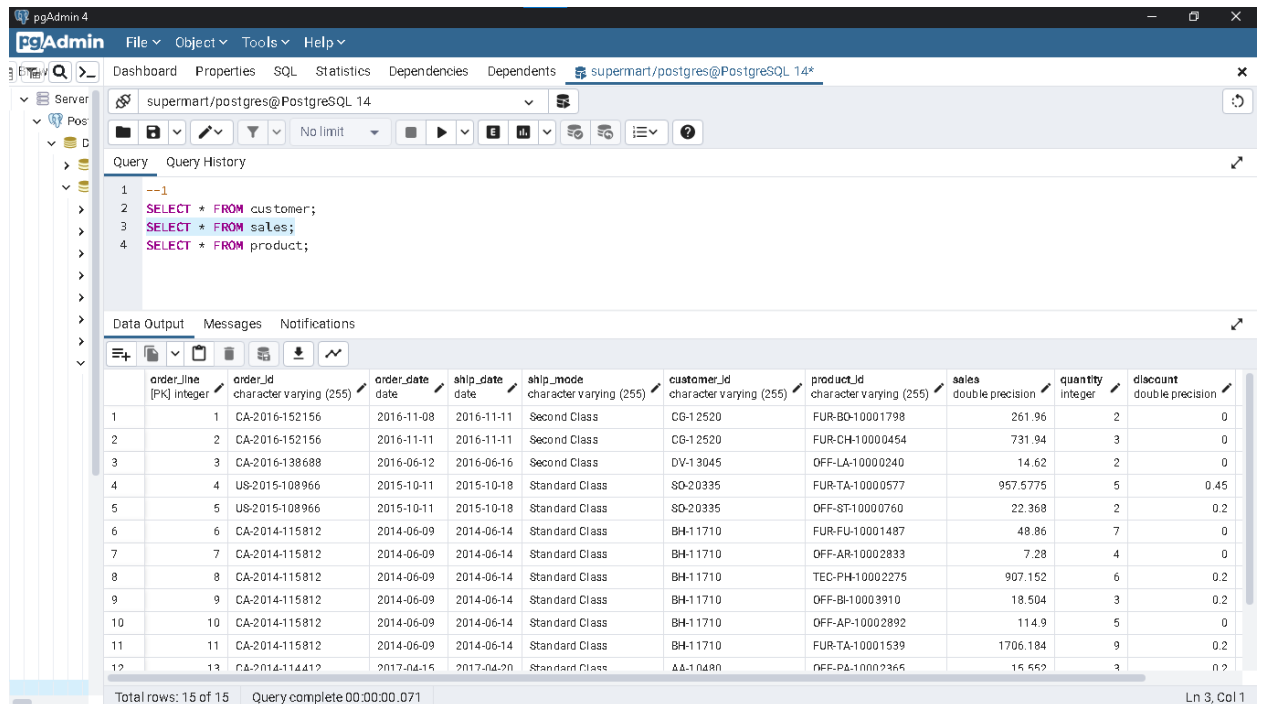


The screenshot shows the pgAdmin 4 interface with a SQL query executed. The query is: `--1  
2 SELECT * FROM customer;  
3 SELECT * FROM sales;  
4 SELECT * FROM product;` The results are displayed in a table with 11 rows and 10 columns.

	customer_id [PK] character varying (255)	customer_name character varying (255)	segment character varying (255)	age integer	country character varying (255)	city character varying (255)	state character varying (255)	postal_code character varying (255)	regi cha
1	UG-50420562	Ibrahim Bramullah	Chairman	20	Indonesian	Jakarta	Jakarta Selatan	50420562	Sou
2	CG-12520	Claire Gule	Customer	67	United States	Henderson	Kentucky	42420	Sou
3	DV-13045	Darrin Van Huff	Corporate	31	United States	Los Angeles	California	42420	Sou
4	SO-20335	Sean O'Donnell	Customer	65	United States	Fort Lauderdale	Florida	33311	Sou
5	BH-11710	Brosina Hoffman	Customer	20	United States	Los Angeles	California	90032	We
6	AA-10480	Andrew Allen	Customer	50	United States	Concord	North Carolina	28027	Sou
7	IM-15070	Irene Maddox	Customer	66	United States	Seattle	Washington	98103	We
8	HP-14815	Harold Pawlan	Home Office	20	United States	Forth Worth	Texas	76106	Cer
9	PK-19075	Pete Kriz	Customer	46	United States	Madison	Wisconsin	53711	Cer
10	AG-10279	Alejandro Grove	Customer	18	United States	West Jordan	Utah	84084	We
11	ZD-21925	Zuschuss Donatelli	Corporate	66	United States	San Francisco	California	94109	We

Total rows: 11 of 11    Query complete 00:00:00.067    Ln 2, Col 1

## Sales:



The screenshot shows the pgAdmin 4 interface with a SQL query executed. The query is: `--1  
2 SELECT * FROM customer;  
3 SELECT * FROM sales;  
4 SELECT * FROM product;` The results are displayed in a table with 12 rows and 11 columns.

	order_line [PK] integer	order_id character varying (255)	order_date date	ship_date date	ship_mode character varying (255)	customer_id character varying (255)	product_id character varying (255)	sales double precision	quantity integer	discount double precision
1	1	CA-2016-152156	2016-11-08	2016-11-11	Second Class	CG-12520	FUR-BQ-10001798	261.96	2	0
2	2	CA-2016-152156	2016-11-11	2016-11-11	Second Class	CG-12520	FUR-CH-10000454	731.94	3	0
3	3	CA-2016-138688	2016-06-12	2016-06-16	Second Class	DV-13045	OFF-LA-10000240	14.62	2	0
4	4	US-2015-108966	2015-10-11	2015-10-18	Standard Class	SO-20335	FUR-TA-10000577	957.5775	5	0.45
5	5	US-2015-108966	2015-10-11	2015-10-18	Standard Class	SO-20335	OFF-ST-10000760	22.368	2	0.2
6	6	CA-2014-115812	2014-06-09	2014-06-14	Standard Class	BH-11710	FUR-FU-10001487	48.86	7	0
7	7	CA-2014-115812	2014-06-09	2014-06-14	Standard Class	BH-11710	OFF-AR-10002833	7.28	4	0
8	8	CA-2014-115812	2014-06-09	2014-06-14	Standard Class	BH-11710	TEC-PH-10002275	907.152	6	0.2
9	9	CA-2014-115812	2014-06-09	2014-06-14	Standard Class	BH-11710	OFF-BI-10003910	18.504	3	0.2
10	10	CA-2014-115812	2014-06-09	2014-06-14	Standard Class	BH-11710	OFF-AP-10002899	114.9	5	0
11	11	CA-2014-115812	2014-06-09	2014-06-14	Standard Class	BH-11710	FUR-TA-10001539	1706.184	9	0.2
12	12	CA-2014-114412	2017-04-15	2017-04-20	Standard Class	AA-10480	OFF-PA-10002365	15.562	3	0.2

Total rows: 15 of 15    Query complete 00:00:00.071    Ln 3, Col 1

## Product:

pgAdmin 4

File Object Tools Help

supermart/postgres@PostgreSQL 14\*

Query

```

1 --1
2 SELECT * FROM customer;
3 SELECT * FROM sales;
4 SELECT * FROM product;

```

Data Output

	product_id [PK] character varying (255)	category character varying (255)	sub_category character varying (255)	product_name character varying (255)
1	FUR-CH-10000454	Furniture	Chairs	Hon Deluxe Fabric Uph...
2	OFF-LA-10000240	Office Supplies	Labels	Self-Adhesive Address ...
3	FUR-TA-10000577	Furniture	Tables	Bretford CR4500 Series...
4	OFF-ST-10000760	Office Supplies	Storage	Eldon Fold N Roll Cart ...
5	FUR-FU-10001487	Furniture	Furnishings	Eldon Expressions Wo...
6	OFF-AR-10002833	Office Supplies	Art	Newell 322
7	TEC-PH-10002775	Technology	Phones	Mitel 5320 IP Phone V...
8	OFF-BI-10003910	Office Supplies	Binders	DXL Angle-View Binder...
9	OFF-AP-10002892	Office Supplies	Appliances	Belkin F5C206VTEL 6 ...
10	FUR-TA-10001539	Furniture	Tables	Chromcraft Rectangula...
11	TEC-PH-10002033	Technology	Phones	Konftel 250 Conferenc...
12	OFF-PA-10002365	Office Supplies	Paper	Xerox 1967

Total rows: 15 of 15 Query complete 00:00:00.074 Ln 4, Col 1

- Tambahkan 4 record data pada tabel sales dengan order\_line 17, 18, 19, 20 dengan isian data secara berurutan.

pgAdmin 4

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Query

```

3 SELECT * FROM sales;
4 SELECT * FROM product;
5
6 --2
7 INSERT INTO sales
8 VALUES
9 ('17','US-2016-141544','2016-08-30','2016-09-01','FIRST CLASS','PO-18850','OFF-LA-10001074',100.24,10,0.2,33.831),
10 ('18','CA-2014-122336','2014-04-13','2014-04-27','SECOND CLASS','JD-15895','TEC-PH-10000702',71.928,14,0.4,8.3916),
11 ('19','CA-2015-149713','2015-09-18','2015-09-22','SECOND CLASS','TG-21640','OFF-PA-10004530',160.72,14,0,78.7528),
12 ('20','CA-2017-130036','2017-08-27','2017-08-27','SAME DAY','BP-11185','TEC-AC-10001908',1119.888,14,0.2,209.979);
13
14 --3
15 SELECT * FROM sales;

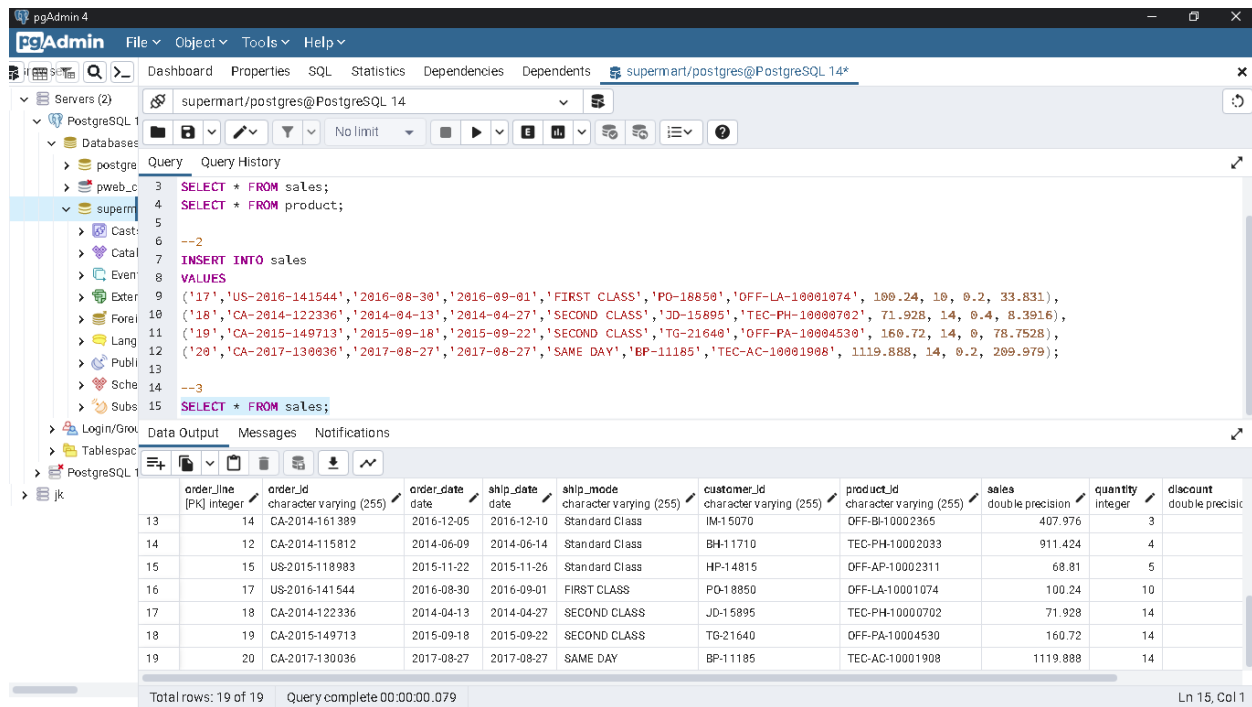
```

Data Output

	order_line [PK] integer	order_id character varying (255)	order_date date	ship_date date	ship_mode character varying (255)	customer_id character varying (255)	product_id character varying (255)	sales double precision	quantity integer	discount double precis
13	14	CA-2014-161389	2016-12-05	2016-12-10	Standard Class	IM-15070	OFF-BI-10002365	407.976	3	
14	12	CA-2014-115812	2014-06-09	2014-06-14	Standard Class	BH-11710	TEC-PH-10002033	911.424	4	
15	15	US-2015-118983	2015-11-22	2015-11-26	Standard Class	HP-14815	OFF-AP-10002311	68.81	5	
16	17	US-2016-141544	2016-08-30	2016-09-01	FIRST CLASS	PO-18850	OFF-LA-10001074	100.24	10	
17	18	CA-2014-122336	2014-04-13	2014-04-27	SECOND CLASS	JD-15895	TEC-PH-10000702	71.928	14	
18	19	CA-2015-149713	2015-09-18	2015-09-22	SECOND CLASS	TG-21640	OFF-PA-10004530	160.72	14	
19	20	CA-2017-130036	2017-08-27	2017-08-27	SAME DAY	BP-11185	TEC-AC-10001908	1119.888	14	

Total rows: 19 of 19 Query complete 00:00:00.079 Ln 15, Col 1

### 3. Tampilkan tabel sales yang telah dilakukan penambahan data (insert data).



The screenshot shows the pgAdmin 4 interface with a PostgreSQL query executed. The query is as follows:

```

3 SELECT * FROM sales;
4 SELECT * FROM product;
5
6 --2
7 INSERT INTO sales
8 VALUES
9 ('17','US-2016-141544','2016-08-30','2016-09-01','FIRST CLASS','PO-18850','OFF-LA-10001074', 100.24, 10, 0.2, 33.831),
10 ('18','CA-2014-122336','2014-04-13','2014-04-27','SECOND CLASS','JD-15895','TEC-PH-10000702', 71.928, 14, 0.4, 8.3916),
11 ('19','CA-2015-149713','2015-09-18','2015-09-22','SECOND CLASS','TG-21640','OFF-PA-10004530', 160.72, 14, 0, 78.7528),
12 ('20','CA-2017-130036','2017-08-27','2017-08-27','SAME DAY','BP-11185','TEC-AC-10001908', 1119.888, 14, 0.2, 209.979);
13
14 --3
15 SELECT * FROM sales;

```

The results table displays 19 rows of data. The columns are: order\_line, order\_id, order\_date, ship\_date, ship\_mode, customer\_id, product\_id, sales, quantity, and discount.

order_line	order_id	order_date	ship_date	ship_mode	customer_id	product_id	sales	quantity	discount
13	14	2016-12-05	2016-12-10	Standard Class	IM-15070	OFF-BH-10002365	407.976	3	
14	12	2014-06-09	2014-06-14	Standard Class	BH-11710	TEC-PH-10002033	911.424	4	
15	15	2015-11-22	2015-11-26	Standard Class	HP-14815	OFF-AP-10002311	68.81	5	
16	17	2016-08-30	2016-09-01	FIRST CLASS	PO-18850	OFF-LA-10001074	100.24	10	
17	18	2014-04-13	2014-04-27	SECOND CLASS	JD-15895	TEC-PH-10000702	71.928	14	
18	19	2015-09-18	2015-09-22	SECOND CLASS	TG-21640	OFF-PA-10004530	160.72	14	
19	20	2017-08-27	2017-08-27	SAME DAY	BP-11185	TEC-AC-10001908	1119.888	14	

Total rows: 19 of 19 Query complete 00:00:00.079 Ln 15, Col 1

- Buatlah perintah self join data pada tabel sales dengan ketentuan menampilkan kolom order\_line dan kolom order\_id sebagai order1 pada tabel sales dengan inisial a, dan lakukan self join dengan tabel sales inisial c dengan menampilkan kolom quantity dan kolom order\_id sebagai order2 dengan kondisi order\_line pada tabel sales a sama dengan quantity pada tabel sales c.

pgAdmin 4

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Query

```

12 ('20', 'CA-2017-138636', '2017-08-27', '2017-08-27', 'SAME DAY', 'BP-11185', 'TEC-AC-10001908', 1119.888, 14, 0.2, 209.979);
13
14 --3
15 SELECT * FROM sales;
16
17 --4
18 SELECT
19   a.order_line, a.order_id AS order1,
20   c.quantity, c.order_id AS order2
21 FROM sales a, sales c
22 WHERE a.order_line = c.quantity;
23
24

```

Data Output

	order_line (PK) integer	order1 character varying (255)	quantity integer	order2 character varying (255)
1	2	CA-2016-152156	2	CA-2016-152156
2	3	CA-2016-138688	3	CA-2016-152156
3	2	CA-2016-152156	2	CA-2016-138688
4	5	US-2015-108966	5	US-2015-108966
5	2	CA-2016-152156	2	US-2015-108966
6	7	CA-2014-115812	7	CA-2014-115812
7	4	US-2015-108966	4	CA-2014-115812
8	6	CA-2014-115812	6	CA-2014-115812

Total rows: 19 of 19    Query complete 00:00:00.086    Ln 21, Col 22

5. Buatlah perintah self join data pada tabel sales dengan ketentuan menampilkan kolom:

- Kolom “order\_line” pada tabel sales dengan inisial a,
- Kolom dengan nama “self\_join\_tabel\_sales” dengan yang terdiri dari gabungan teks beserta isi data kolom order\_id pada tabel sales dengan inisial a dan c,
- Kolom “quantity” pada tabel sales dengan inisial a

Dengan kondisi order\_line pada tabel sales a sama dengan quantity pada tabel sales c

pgAdmin 4

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Query Query History

```
--4
17
18 SELECT
19 a.order_line, a.order_id AS order1,
20 c.quantity, c.order_id AS order2
21 FROM sales a, sales c
22 WHERE a.order_line = c.quantity;

--5
23
24
25 SELECT a.order_line,
26 'angka order_line pada order_id ' || a.order_id || 'sama dengan quantity pada order_id' || c.order_id AS self_join_tables_sales
27 FROM sales a, sales c
28 WHERE a.order_line = c.quantity;
29
```

Data Output Messages Notifications

	order_line [PK] integer	self_join_tables_sales text
1	2	angka order_line pad...
2	3	angka order_line pad...
3	2	angka order_line pad...
4	5	angka order_line pad...
5	2	angka order_line pad...
6	7	angka order_line pad...
7	4	angka order_line pad...

Total rows: 19 of 19 Query complete 00:00:00.078 Ln 29, Col 1