SQL Task 6

DATA ENGINEERING

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BYTEWISE LDT
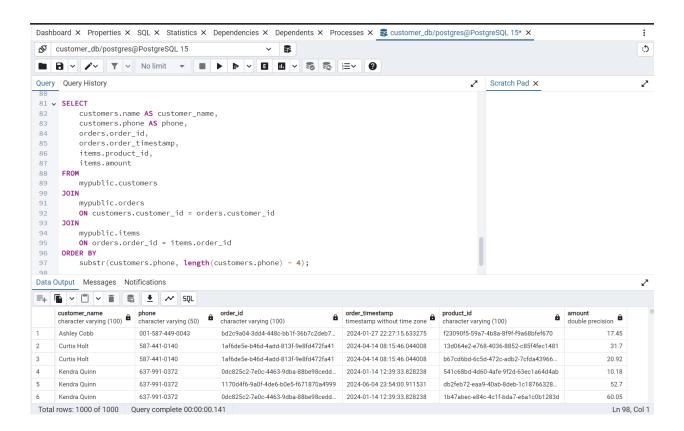
DE - Task 6

Q1: Write a query to retrieve all orders placed by customers, including customer details (name, phone), order details (order ID, timestamp), and item details (product, amount).

Query:

SELECT

   customers.name AS customer_name,

   customers.phone AS phone,

   orders.order_id,

   orders.order_timestamp,

   items.product_id,

   items.amount

FROM

   mypublic.customers

JOIN

   mypublic.orders

   ON customers.customer_id = orders.customer_id

JOIN

   mypublic.items

   ON orders.order_id = items.order_id

ORDER BY

   substr(customers.phone, length(customers.phone) - 4);

Result:

customer_db/postgres@PostgreSQL 15

```
80
81 ⌄  SELECT
82         customers.name AS customer_name,
83         customers.phone AS phone,
84         orders.order_id,
85         orders.order_timestamp,
86         items.product_id,
87         items.amount
88     FROM
89         mypublic.customers
90     JOIN
91         mypublic.orders
92         ON customers.customer_id = orders.customer_id
93     JOIN
94         mypublic.items
95         ON orders.order_id = items.order_id
96     ORDER BY
97         substr(customers.phone, length(customers.phone) - 4);
98
```

Query   Query History   Scratch Pad ✕

Data Output   Messages   Notifications

	customer_name character varying (100)	phone character varying (50)	order_id character varying (100)	order_timestamp timestamp without time zone	product_id character varying (100)	amount double precision
1	Ashley Cobb	001-587-449-0043	bd2c9a04-3dd4-448c-bb1f-36b7c2deb7…	2024-01-27 22:27:15.633275	f23090f5-59a7-4b8a-8f9f-f9a68bfef670	17.45
2	Curtis Holt	587-441-0140	1af6de5e-b46d-4add-813f-9e8fd472fa41	2024-04-14 08:15:46.044008	13d064e2-e768-4036-8852-c85f4fec1481	31.7
3	Curtis Holt	587-441-0140	1af6de5e-b46d-4add-813f-9e8fd472fa41	2024-04-14 08:15:46.044008	b67cd6bd-6c5d-472c-adb2-7cfda43966…	20.92
4	Kendra Quinn	637-991-0372	0dc825c2-7e0c-4463-9dba-88be98cedd…	2024-01-14 12:39:33.828238	541c68bd-4d60-4afe-9f2d-63ec1a64d4ab	10.18
5	Kendra Quinn	637-991-0372	1170d4f6-9a0f-4de6-b0e5-f671870a4999	2024-06-04 23:54:00.911531	db2feb72-eaa9-40ab-8deb-1c18766328…	52.7
6	Kendra Quinn	637-991-0372	0dc825c2-7e0c-4463-9dba-88be98cedd…	2024-01-14 12:39:33.828238	1b47abec-e84c-4c1f-bda7-e6a1c0b1283d	60.05

Total rows: 1000 of 1000   Query complete 00:00:00.141   Ln 98, Col 1

Q2: Write a query to fetch all products along with their suppliers' details (name, phone) and the corresponding category name.

Query:

SELECT

   products.name AS product_name,

       products.category AS product_category,

   suppliers.name AS supplier_name,

   suppliers.phone AS supplier_contact,

   suppliers.category AS supplier_category

FROM

   mypublic.products
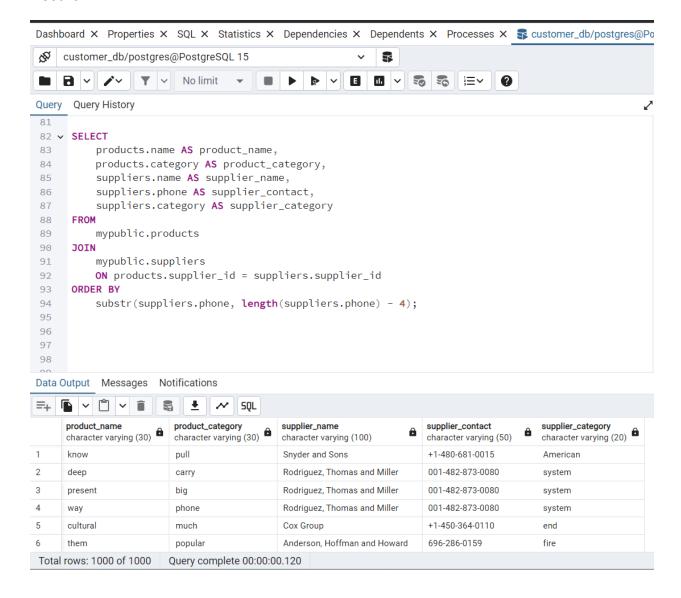
JOIN

mypublic.suppliers

      ON products.supplier_id = suppliers.supplier_id

ORDER BY

      substr(suppliers.phone, length(suppliers.phone) - 4);

Result:

Dashboard ✕   Properties ✕   SQL ✕   Statistics ✕   Dependencies ✕   Dependents ✕   Processes ✕   🛢 customer_db/postgres@Po

customer_db/postgres@PostgreSQL 15

Query   Query History

```
81
82 ∨  SELECT
83         products.name AS product_name,
84         products.category AS product_category,
85         suppliers.name AS supplier_name,
86         suppliers.phone AS supplier_contact,
87         suppliers.category AS supplier_category
88     FROM
89         mypublic.products
90     JOIN
91         mypublic.suppliers
92         ON products.supplier_id = suppliers.supplier_id
93     ORDER BY
94         substr(suppliers.phone, length(suppliers.phone) - 4);
95
96
97
98
```

Data Output   Messages   Notifications

	product_name character varying (30) 🔒	product_category character varying (30) 🔒	supplier_name character varying (100) 🔒	supplier_contact character varying (50) 🔒	supplier_category character varying (20) 🔒
1	know	pull	Snyder and Sons	+1-480-681-0015	American
2	deep	carry	Rodriguez, Thomas and Miller	001-482-873-0080	system
3	present	big	Rodriguez, Thomas and Miller	001-482-873-0080	system
4	way	phone	Rodriguez, Thomas and Miller	001-482-873-0080	system
5	cultural	much	Cox Group	+1-450-364-0110	end
6	them	popular	Anderson, Hoffman and Howard	696-286-0159	fire

Total rows: 1000 of 1000   Query complete 00:00:00.120

Q3: Write a query to retrieve details of all orders including the product name and amount ordered for each item.

Query:
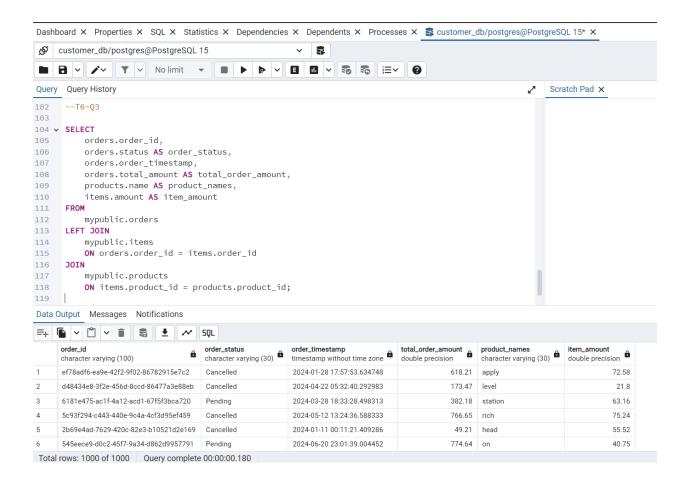
```sql
SELECT

        orders.order_id,

        orders.status AS order_status,

        orders.order_timestamp,

        orders.total_amount AS total_order_amount,

        products.name AS product_names,

        items.amount AS item_amount

FROM

        mypublic.orders

LEFT JOIN

        mypublic.items

        ON orders.order_id = items.order_id

JOIN

        mypublic.products

        ON items.product_id = products.product_id;
```

Result:

customer_db/postgres@PostgreSQL 15

Query   Query History   Scratch Pad ✕

```
102     --T6-Q3
103
104 ⌄  SELECT
105         orders.order_id,
106         orders.status AS order_status,
107         orders.order_timestamp,
108         orders.total_amount AS total_order_amount,
109         products.name AS product_names,
110         items.amount AS item_amount
111     FROM
112         mypublic.orders
113     LEFT JOIN
114         mypublic.items
115         ON orders.order_id = items.order_id
116     JOIN
117         mypublic.products
118         ON items.product_id = products.product_id;
119     |
```

Data Output   Messages   Notifications

	order_id character varying (100)	order_status character varying (30)	order_timestamp timestamp without time zone	total_order_amount double precision	product_names character varying (30)	item_amount double precision
1	ef78adf6-ea9e-42f2-9f02-86782915e7c2	Cancelled	2024-01-28 17:57:53.634748	618.21	apply	72.58
2	d48434e8-3f2e-456d-8ccd-86477a3e88eb	Cancelled	2024-04-22 05:32:40.292983	173.47	level	21.8
3	6181e475-ac1f-4a12-acd1-67f5f3bca720	Pending	2024-03-28 18:33:28.498313	382.18	station	63.16
4	5c93f294-c443-440e-9c4a-4cf3d95ef459	Cancelled	2024-05-12 13:24:36.588333	766.65	rich	75.24
5	2b69e4ad-7629-420c-82e3-b10521d2e169	Cancelled	2024-01-11 00:11:21.409286	49.21	head	55.52
6	545eece9-d0c2-45f7-9a34-d862d9957791	Pending	2024-06-20 23:01:39.004452	774.64	on	40.75

Total rows: 1000 of 1000   Query complete 00:00:00.180

Q4: Write a query to retrieve all suppliers along with the city and country where they are located, and the products they supply.

Query:

SELECT

        suppliers.supplier_id,

        suppliers.name AS supplier_names,

        suppliers.location AS suppliers_city,

        cities.country,

        products.name AS supplying_products

FROM

        mypublic.suppliers

JOIN

    mypublic.cities

    ON suppliers.location = cities.name

JOIN

    mypublic.products

    ON suppliers.supplier_id = products.supplier_id;

Result: