

SQL Task 6

DATA ENGINEERING

Jahanzeb Ahmed
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:

Dashboard × Properties × SQL × Statistics × Dependencies × Dependents × Processes × customer_db/postgres@PostgreSQL 15* ×

customer_db/postgres@PostgreSQL 15

No limit

Query Query History

```

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

```

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-eea9-40ab-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:

The screenshot shows a PostgreSQL query editor interface. The top navigation bar includes tabs for Dashboard, Properties, SQL, Statistics, Dependencies, Dependents, Processes, and a connection tab for customer_db/postgres@Po. Below the navigation bar is a toolbar with icons for file operations, query execution, and settings. The main area displays a SQL query with line numbers 81 through 98. The query is a SELECT statement that joins products and suppliers tables, selecting product details and supplier contact information, ordered by the last four digits of the supplier phone number. Below the query editor, the 'Data Output' tab is active, showing a table with 6 columns: product_name, product_category, supplier_name, supplier_contact, and supplier_category. The table contains 6 rows of data. At the bottom, a status bar indicates 'Total rows: 1000 of 1000' and 'Query complete 00:00:00.120'.

```
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
```

	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:

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:

Dashboard × Properties × SQL × Statistics × Dependencies × Dependents × Processes × customer_db/postgres@PostgreSQL 15* ×

customer_db/postgres@PostgreSQL 15

No limit

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:

Dashboard X Properties X SQL X Statistics X Dependencies X Dependents X Processes X customer_db/postgres@PostgreSQL 15* X

customer_db/postgres@PostgreSQL 15

No limit

Query Query History Scratch Pad X

```
121 --T6-Q4
122
123 v SELECT
124     suppliers.supplier_id,
125     suppliers.name AS supplier_names,
126     suppliers.location AS suppliers_city,
127     cities.country,
128     products.name AS supplying_products
129 FROM
130     mypublic.suppliers
131 JOIN
132     mypublic.cities
133     ON suppliers.location = cities.name
134 JOIN
135     mypublic.products
136     ON suppliers.supplier_id = products.supplier_id;
137
138
```

Data Output Messages Notifications

SQL

	supplier_id character varying (100)	supplier_names character varying (100)	suppliers_city character varying (50)	country character varying (100)	supplying_products character varying (30)
1	063f7075-f3c0-4408-8410-e1e955f7aff5	Hall, Garcia and Wiggins	Lake Michael	Slovenia	letter
2	c126fc37-8361-4e15-ad2e-10f501db144c	Drake Group	East James	Bangladesh	relationship
3	88ee504a-c2a8-473a-a407-5419266c25...	Shaffer, Rodriguez and Sandoval	Lake Jessica	Falkland Islands (Malvinas)	small
4	8446f667-1e5d-4f38-89e0-83e919c614ed	Tyler-Burgess	Robertview	Malawi	same
5	54457ba9-f426-4867-bc80-f479aa1815dd	Short, Johnson and Smith	Jonesmouth	Italy	by
6	4dbbbc83-5332-4560-9665-4e4300af4e26	Clark-Garcia	Christopherfort	Mauritius	letter

Total rows: 79 of 79 Query complete 00:00:00.111