

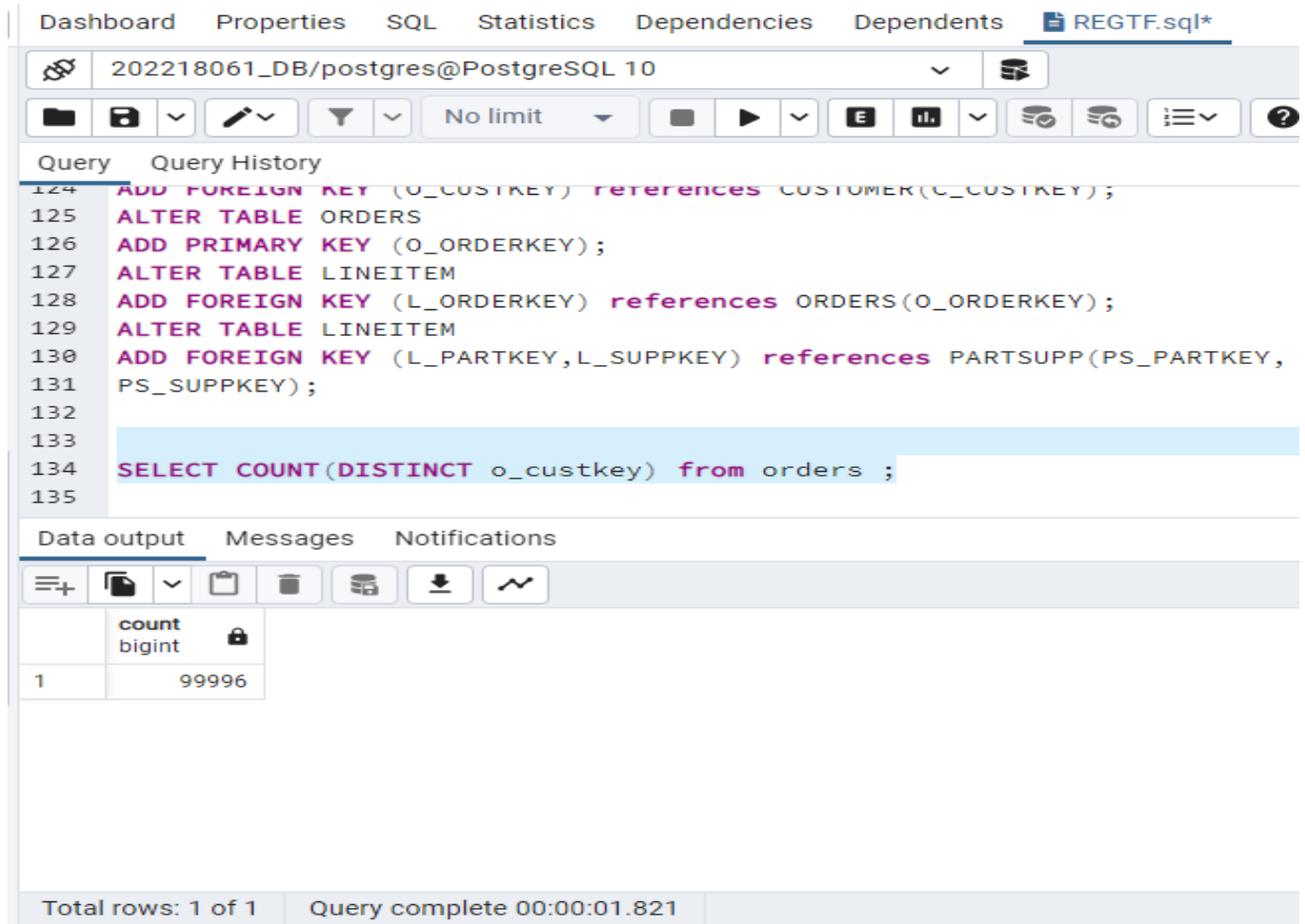
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**IT667 - Database Management Systems**  
**Lab Assignment 4 - Setting up PostgreSQL and trying basic queries**

a. Count the number of customers who have placed at least one order.

**QUERY :**

**SELECT count(DISTINCT o\_custkey) from orders ;**

**OUTPUT:**



The screenshot shows the PostgreSQL query editor interface. The top bar includes tabs for Dashboard, Properties, SQL, Statistics, Dependencies, and Dependents, with a file named REGTF.sql\* open. The connection string is 202218061\_DB/postgres@PostgreSQL 10. The query editor shows a series of SQL commands for setting up a database, followed by the query: `SELECT COUNT(DISTINCT o_custkey) from orders ;`. The results pane shows a single row with the count 99996. The status bar at the bottom indicates 'Total rows: 1 of 1' and 'Query complete 00:00:01.821'.

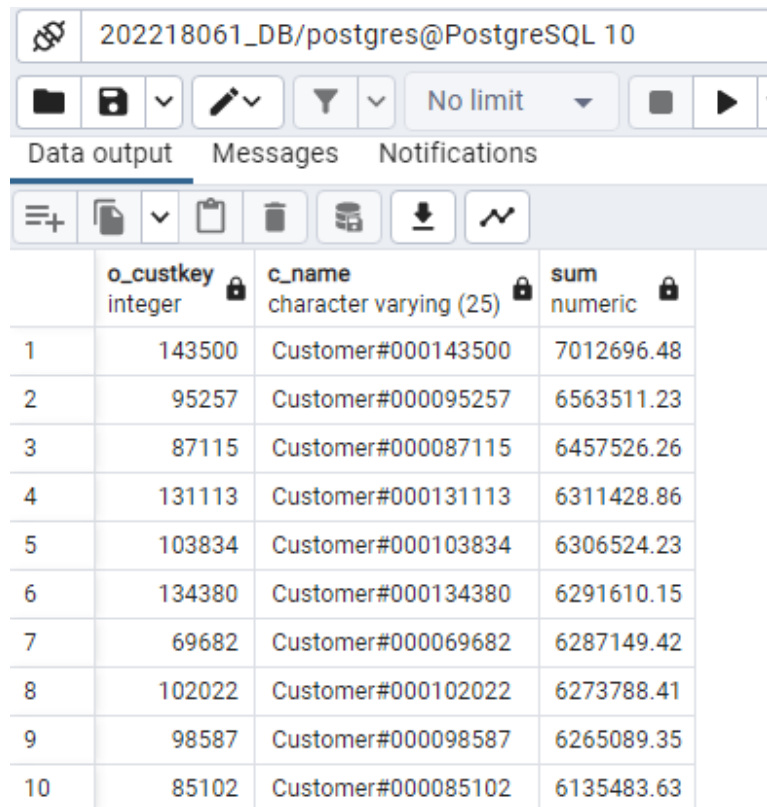
	count bigint
1	99996

b. Find the top 10 highest spending customers based on the total of all orders.

**QUERY:**

```
SELECT orders.o_custkey,customer.c_name,SUM(orders.o_totalprice)
FROM orders
JOIN customer
ON orders.o_custkey = customer.c_custkey
GROUP BY o_custkey,c_name
ORDER BY SUM(orders.o_totalprice) DESC
LIMIT 10;
```

**OUTPUT:**



The screenshot shows a PostgreSQL query editor interface. At the top, the database connection is '202218061\_DB/postgres@PostgreSQL 10'. Below the connection bar are icons for file operations, a filter icon, and a 'No limit' dropdown. The main area is divided into 'Data output', 'Messages', and 'Notifications' tabs. The 'Data output' tab is active, showing a table with 4 columns: 'o\_custkey' (integer), 'c\_name' (character varying (25)), and 'sum' (numeric). The table contains 10 rows of data, representing the top 10 highest spending customers.

	o_custkey integer	c_name character varying (25)	sum numeric
1	143500	Customer#000143500	7012696.48
2	95257	Customer#000095257	6563511.23
3	87115	Customer#000087115	6457526.26
4	131113	Customer#000131113	6311428.86
5	103834	Customer#000103834	6306524.23
6	134380	Customer#000134380	6291610.15
7	69682	Customer#000069682	6287149.42
8	102022	Customer#000102022	6273788.41
9	98587	Customer#000098587	6265089.35
10	85102	Customer#000085102	6135483.63

c. Find the 3rd highest order in terms of order total.

**QUERY:**

**SELECT \***

**FROM orders**

**WHERE o\_totalprice DESC**

**LIMIT 1 OFFSET 2 ;**

**OUTPUT:**

	o_orderkey [PK] integer	o_custkey integer	o_orderstatus character (1)	o_totalprice numeric (15,2)	o_orderdate date	o_orderpriority character (15)	o_clerk character (15)	o_shippriority integer	o_comment character varying (79)	extra character varying (20)
1	3043270	144617	0	530604.44	1997-02-12	5-LOW	Clerk#0000006...	0	riously final deposits?	

d. Find the customers who have placed orders between 1993 and 1995.

I.e.

fetch the Customer Key of the customers. Sort the result by order date.

**QUERY:**

**SELECT o\_custkey**

**FROM orders**

**WHERE EXTRACT( YEAR FROM o\_orderdate )**

**BETWEEN '1993' AND '1995'**

**ORDER BY o\_orderdate:**

**OUTPUT:**

