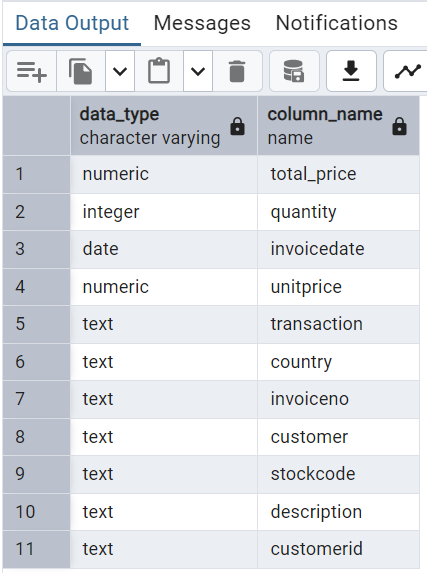
**1.Get column info & structure:**

select data\_type,column\_name

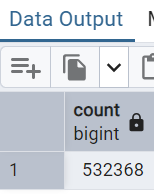
from information\_schema.columns

where table\_name='data\_cleaned'



**2.Total number of rows (observations):**

select count(\*) from data\_cleaned

****

**3.Top 10 selling products by total revenue:**

select total\_price from data\_cleaned

order by total\_price desc

limit 10

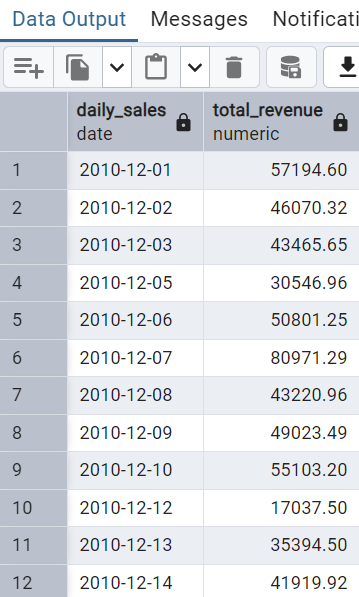


**4.total revenue per day:**

select invoicedate :: date as daily\_sales,sum(total\_price) as total\_revenue from data\_cleaned

group by daily\_sales

order by daily\_sales

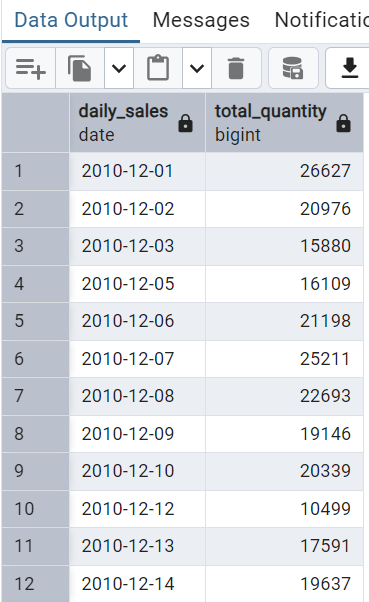


**5.total quantity sold per day:**

select invoicedate :: date as daily\_sales, sum(quantity) as total\_quantity from data\_cleaned

group by invoicedate :: date

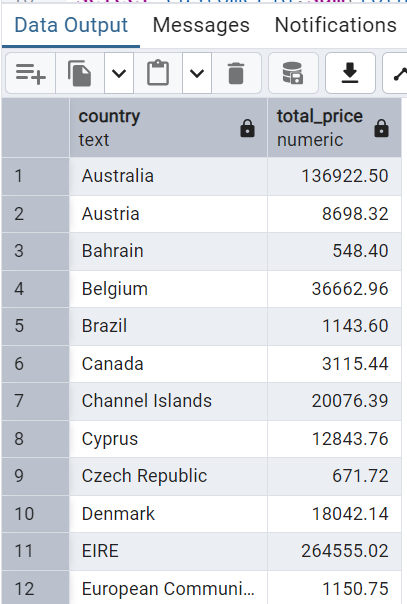
order by daily\_sales



**6**. **Sales by country:**

select country , sum(total\_price) as total\_price from data\_cleaned

group by country



**7.** **Top customers by revenue:**

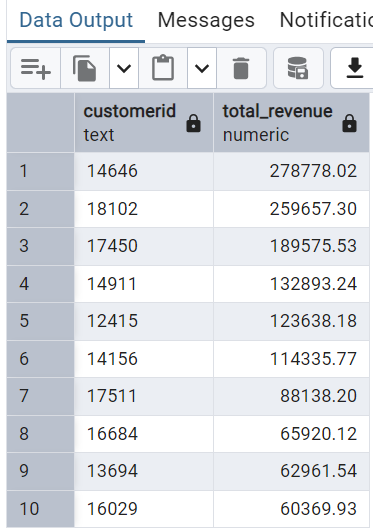
select customerid,sum(total\_price) as total\_revenue from data\_cleaned

where customerid is not null

group by customerid

order by total\_revenue desc

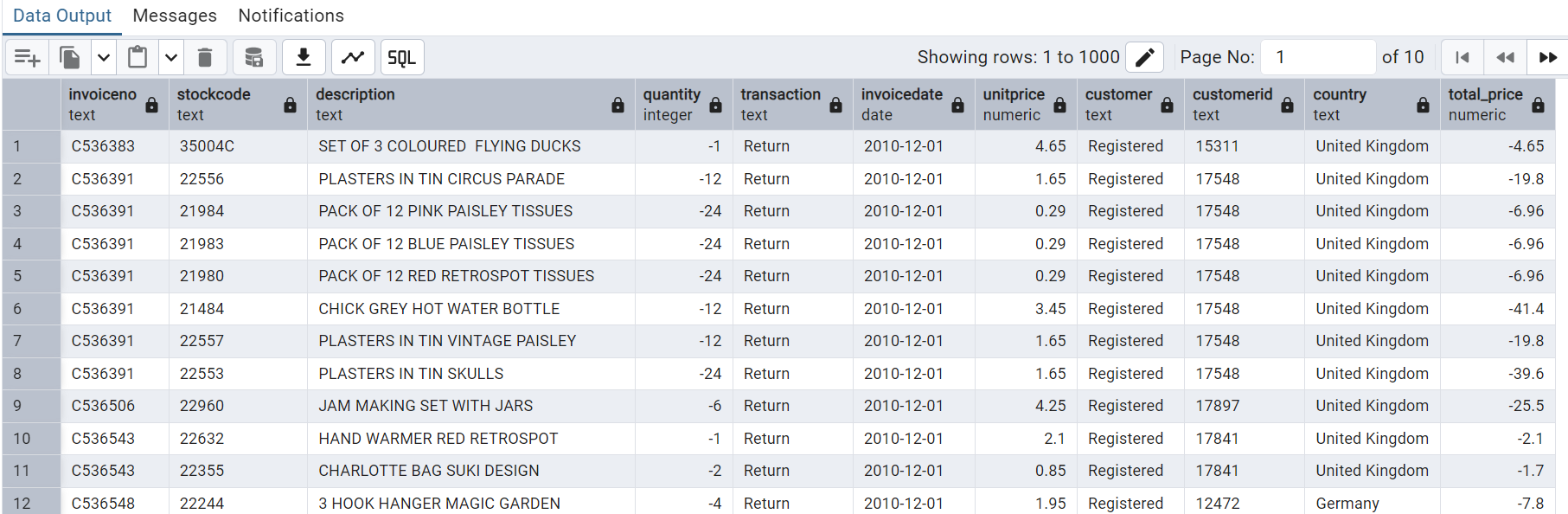
limit 10



**8**. **Detecting returns or negative transactions:**

select \* from data\_cleaned

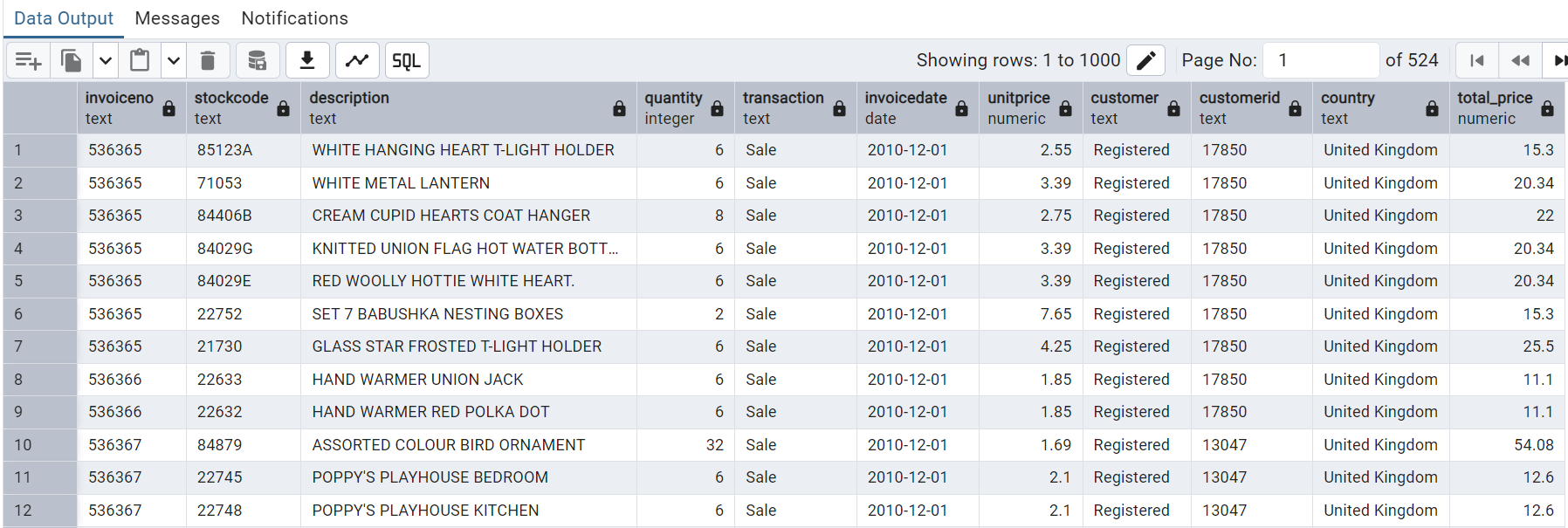
where quantity<0



**9**. **Valid transactions only (filtering returns):**

select \* from data\_cleaned

where quantity>0



**10. Monthly Sales Trend:**

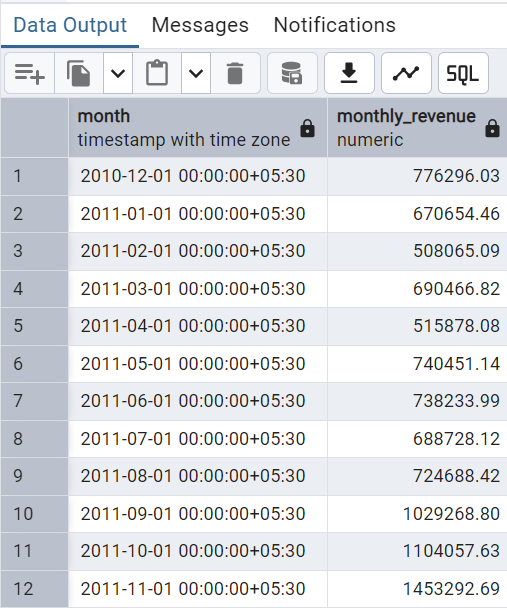
select date\_trunc('month',invoicedate) as month,

round(sum(total\_price),2) as monthly\_revenue from data\_cleaned

where quantity>0

group by month

order by month

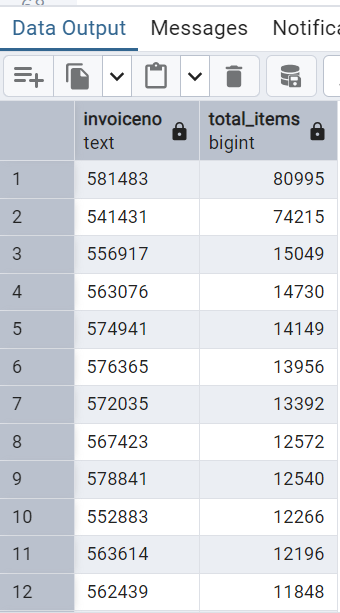


**11. Basket Size (Average quantity per order)**

select invoiceno,sum(quantity) as total\_items from data\_cleaned

group by invoiceno

order by total\_items desc



**12. Average Order Value (AOV)(quantity wise)**

select round(avg(order\_value),2) as avg\_order\_value

from(

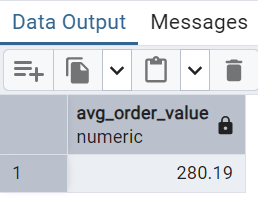
select invoiceno,sum(quantity) as order\_value

from data\_cleaned

where quantity>0

group by invoiceno

)as subquery



**13. Average Order Value (AOV)**

select round(avg(order\_value),2) as avg\_order\_value

from(

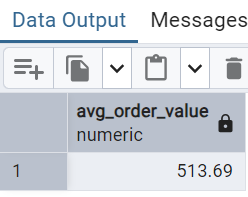
select invoiceno,sum(total\_price) as order\_value

from data\_cleaned

where quantity>0

group by invoiceno

)as subquery



**14. Most Returned Products**

select description,count(\*) as return\_count

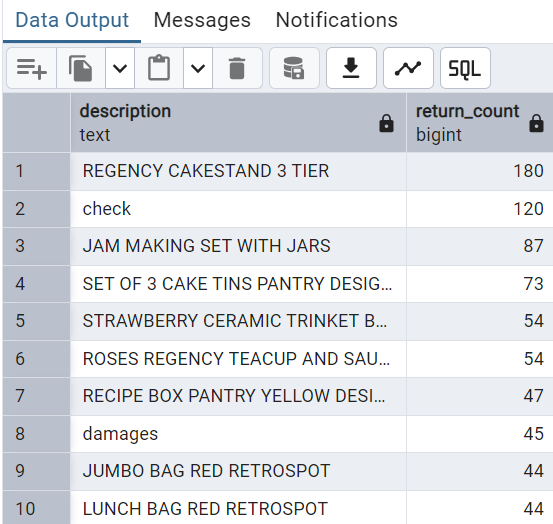
from data\_cleaned

where quantity<0

group by description

order by return\_count desc

limit 10



**15. Customer Segmentation by Spend:**

select customerid, sum(total\_price) as total\_spent,

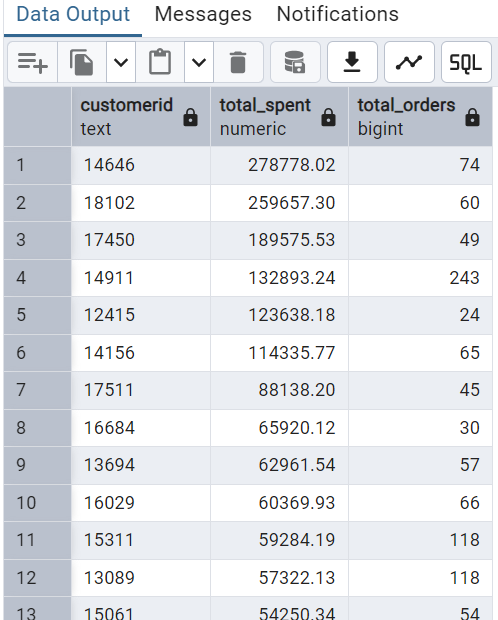
count(distinct invoiceno) as total\_orders

from data\_cleaned

where customerid is not null

group by customerid

order by total\_spent desc



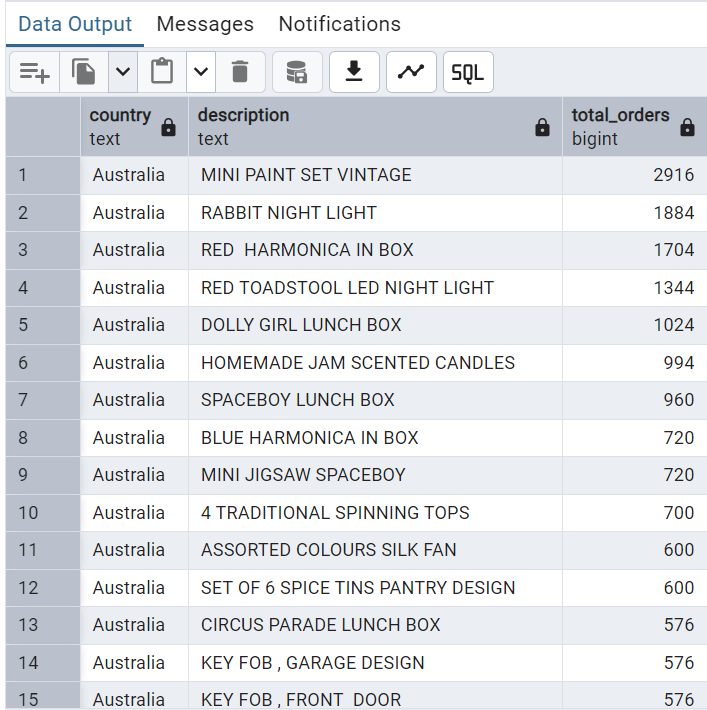
**16. Top Products Per Country:**

select country,description,sum(quantity) as total\_orders

from data\_cleaned

group by 1,2

order by 1,3 desc



**17. Day of Week Sales Trend**

select

to\_char(invoicedate,'Day') as day\_of\_week,

sum(total\_price) as revenue

from data\_cleaned

where quantity>0

group by day\_of\_week

order by day\_of\_week desc

