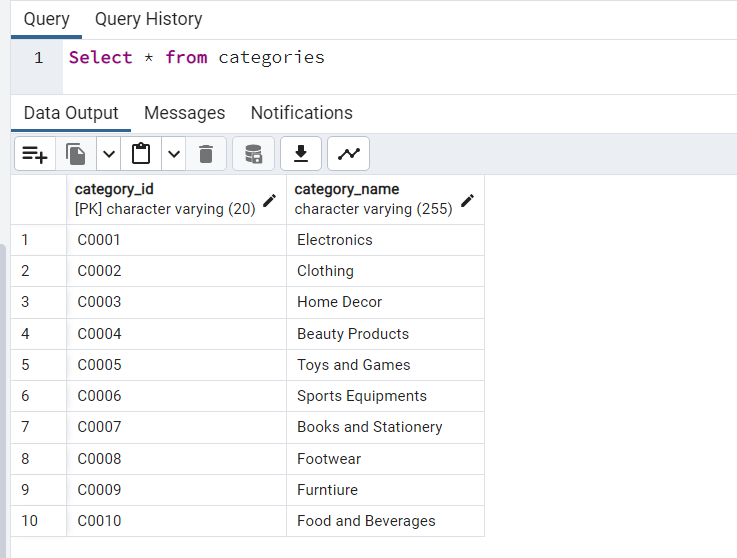
**Task 3: SQL for Data Analysis**

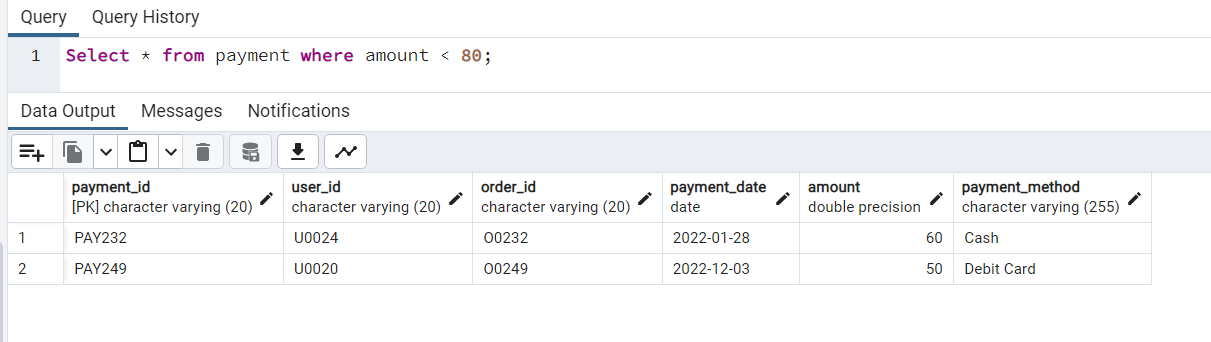
1. **SELECT**

Select \* from categories

****

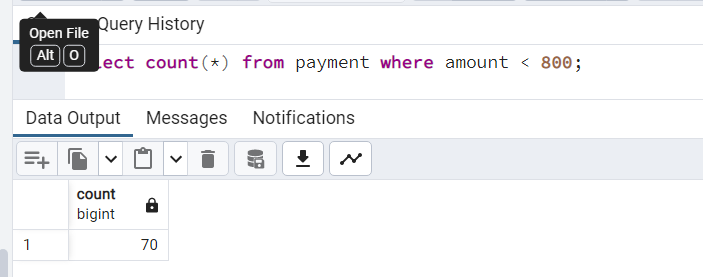
1. **WHERE**

Select \* from payment where amount < 80;

****

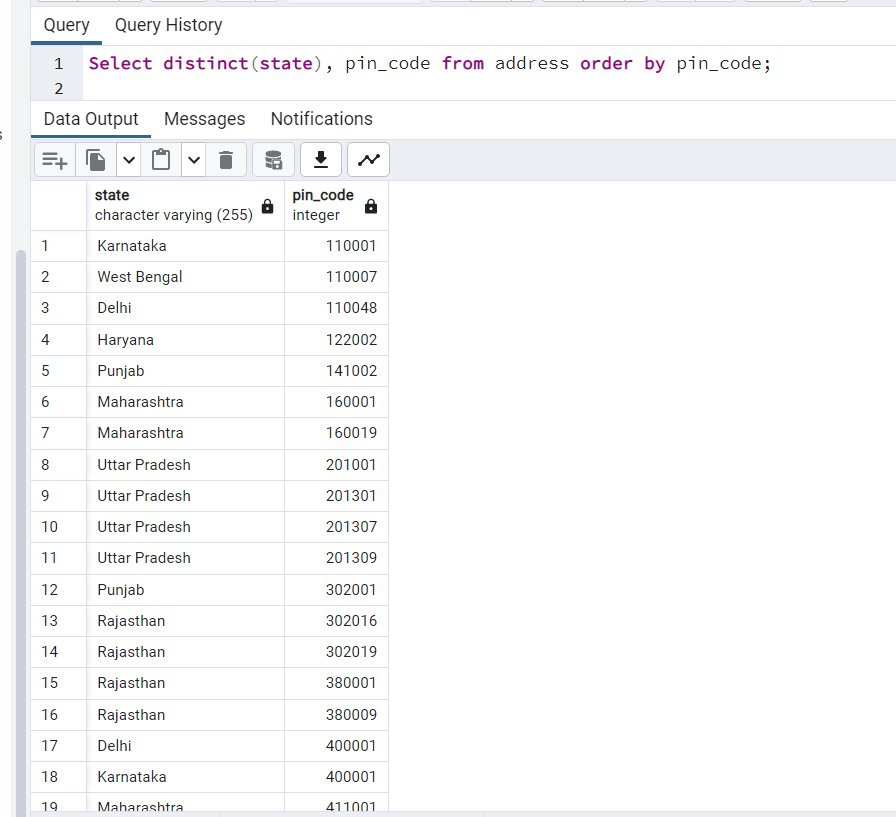
1. **COUNT**

Select count(\*) from payment where amount < 800;

****

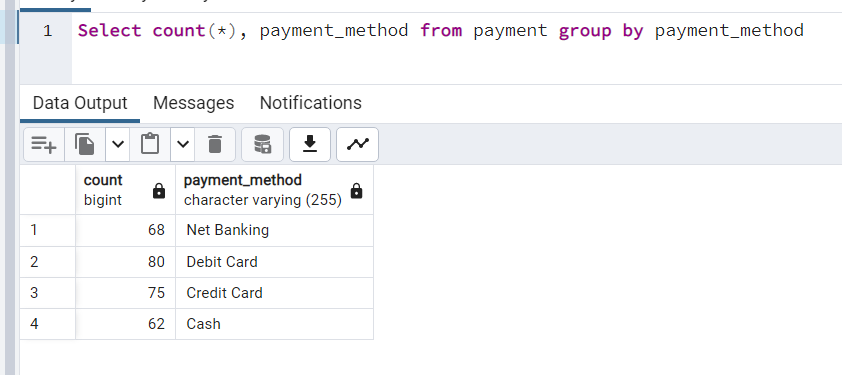
1. **ORDER BY**

Select distinct(state), pin\_code from address order by pin\_code;

****

1. **GROUP BY**

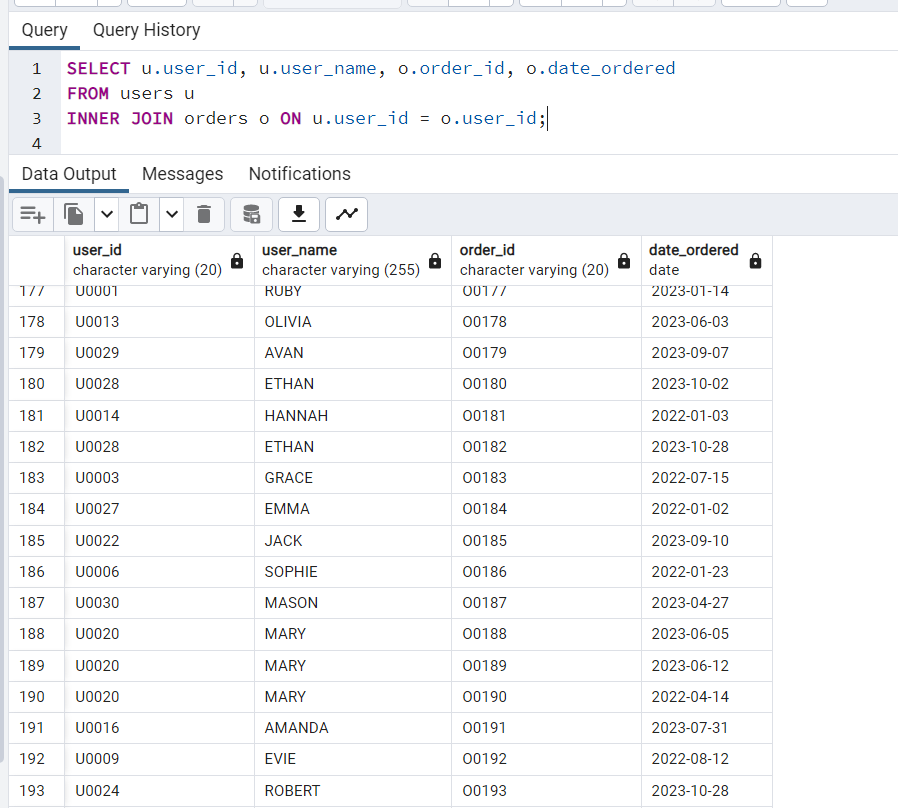
Select count(\*), payment\_method from payment group by payment\_method

****

1. **INNER JOIN**

*Users who have placed orders. Returns only users details who have placed at least one order.*

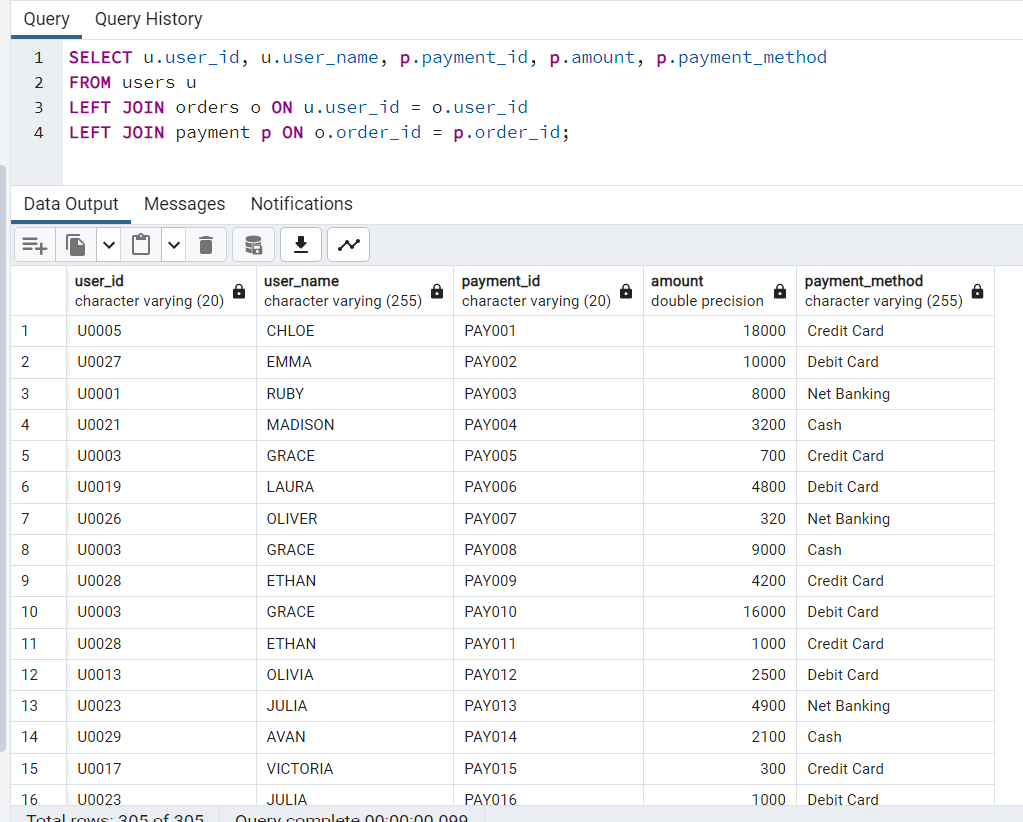
SELECT u.user\_id, u.user\_name, o.order\_id, o.order\_date FROM users u INNER JOIN orders o ON u.user\_id = o.user\_id;

****

1. **LEFT JOIN**

*All users and their payment status (if any). Shows all users, including those who haven’t made any payment. If there’s no payment, the related fields will be NULL.*

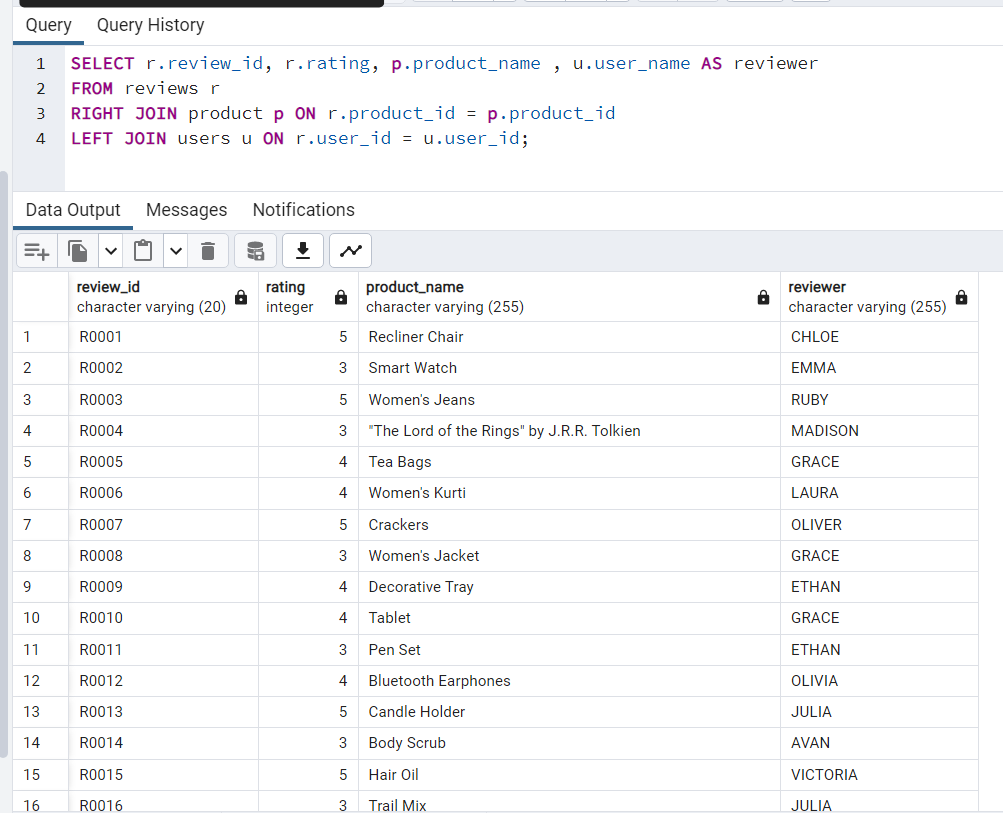
SELECT u.user\_id, u.user\_name, p.payment\_id, p.amount, p.payment\_method FROM users u LEFT JOIN orders o ON u.user\_id = o.user\_id LEFT JOIN payment p ON o.order\_id = p.order\_id;

****

1. **RIGHT JOIN**

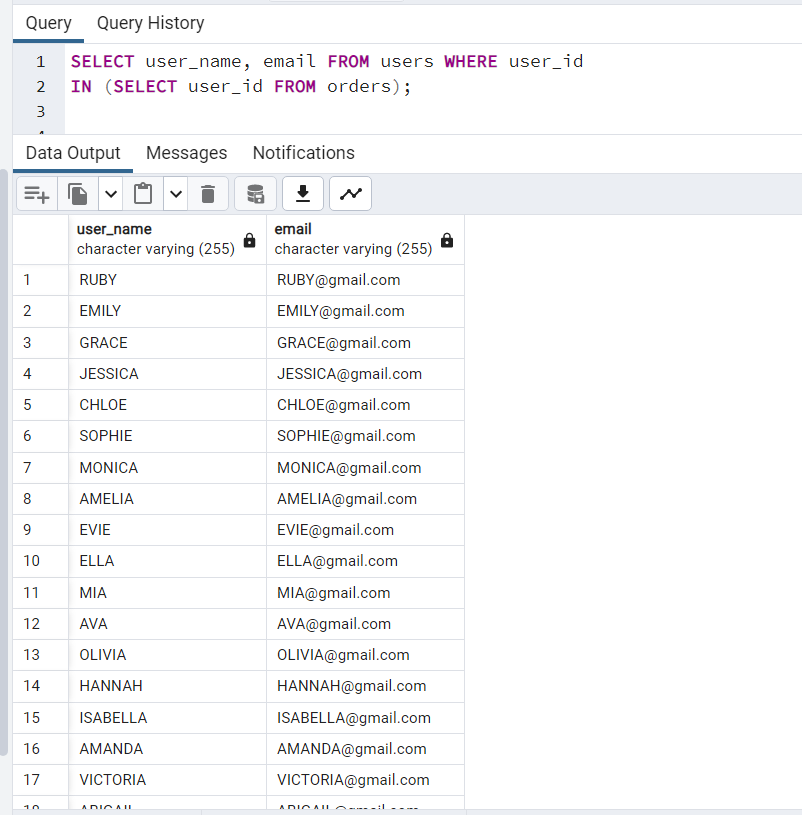
*Products that have been reviewed (and their reviewers). Shows all products that have reviews. If a product has no review, it still shows up with NULL in review fields (though here it’s a RIGHT JOIN from review to product, emphasizing product visibility).*

SELECT r.review\_id, r.rating, p.product\_name , u.user\_name AS reviewer FROM reviews r RIGHT JOIN product p ON r.product\_id = p.product\_id LEFT JOIN users u ON r.user\_id = u.user\_id;

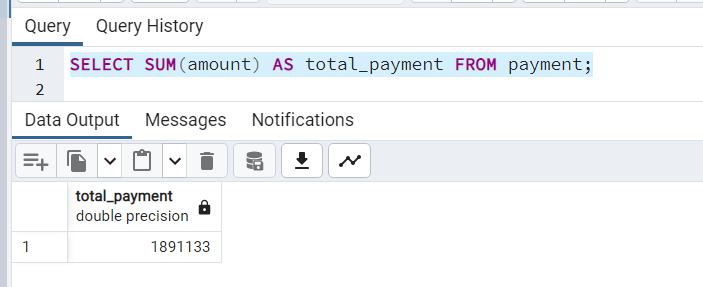
****

1. **SUBQUERY**

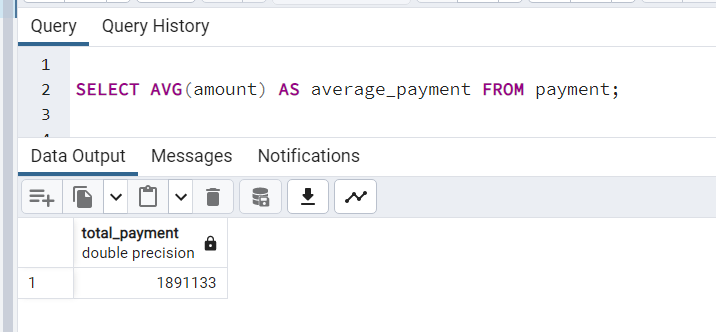
SELECT user\_name, email FROM users WHERE user\_id IN (SELECT user\_id FROM orders);

****

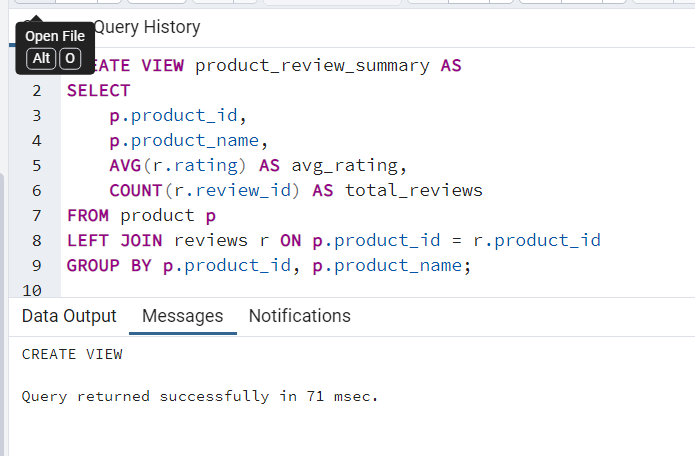
1. **AGGREGATE (SUM)**

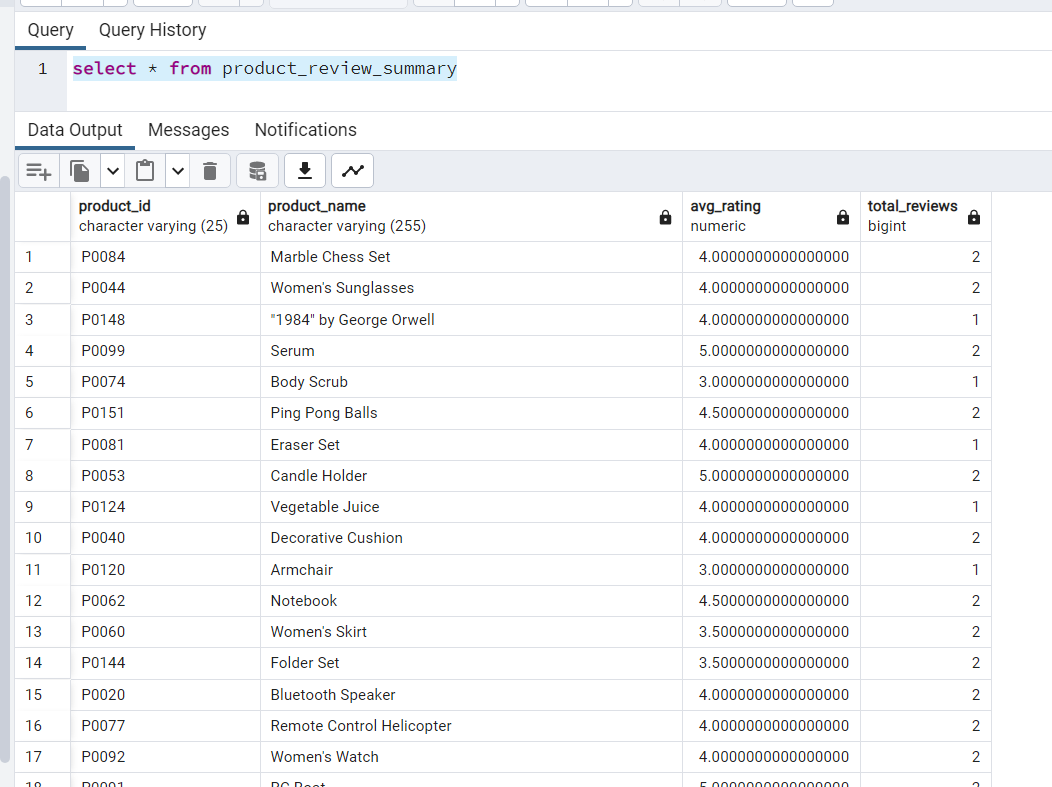
****

1. **AGGREGATE (AVG)**

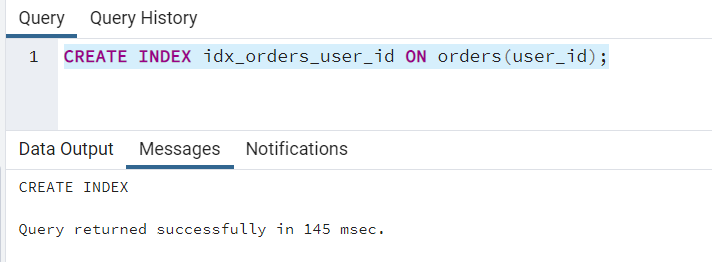
****

1. **VIEW**

****

****

1. **INDEX**

****