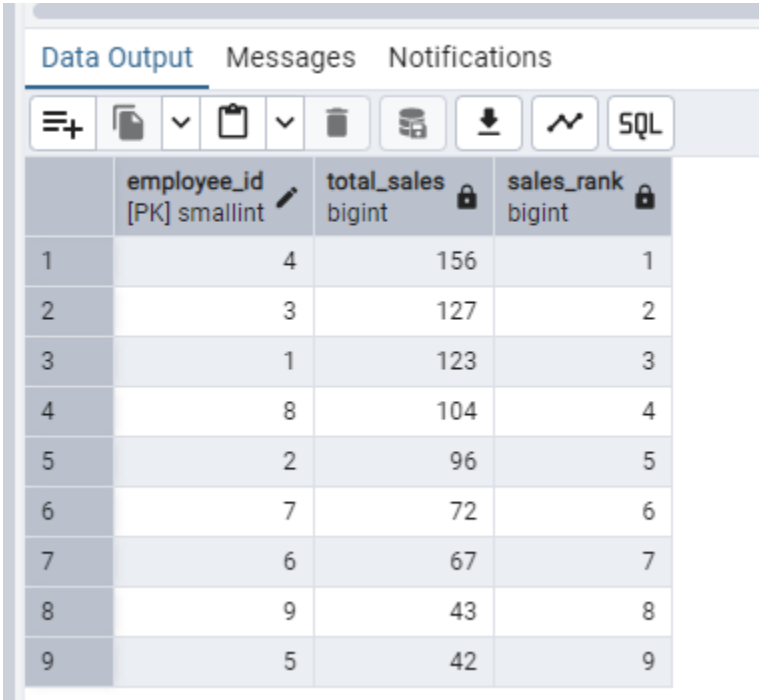
YAMUNA DAY7 ASSIGNMENTS

1. Rank employees by their total sales

(Total sales = Total no of orders handled, JOIN employees and orders table)

```
select
        E.employee_id,
        count(*) as total_sales,
        Rank() over(order by count(order_id) desc) as sales_rank
from orders O
join employees E on O.employee_id = E.employee_id
group by E.employee_id
order by 2 desc;
```



Data Output | Messages | Notifications

	employee_id [PK] smallint	total_sales bigint	sales_rank bigint
1	4	156	1
2	3	127	2
3	1	123	3
4	8	104	4
5	2	96	5
6	7	72	6
7	6	67	7
8	9	43	8
9	5	42	9

2. Compare current order's freight with previous and next order for each customer.

(Display order_id, customer_id, order_date, freight,

Use lead(freight) and lag(freight).

```
select order_id, customer_id, order_date,freight,
lag(freight) over (partition by customer_id order by freight) as previous_order_freight,
lead(freight) over (partition by customer_id order by freight) as next_order_freight
from orders;
```

	order_id [PK] smallint	customer_id character varying (5)	order_date date	freight real	previous_order_freight real	next_order_freight real
1	11011	ALFKI	1998-04-09	1.21	[null]	23.94
2	10702	ALFKI	1997-10-13	23.94	1.21	29.46
3	10643	ALFKI	1997-08-25	29.46	23.94	40.42
4	10952	ALFKI	1998-03-16	40.42	29.46	61.02
5	10692	ALFKI	1997-10-03	61.02	40.42	69.53
6	10835	ALFKI	1998-01-15	69.53	61.02	[null]
7	10308	ANATR	1996-09-18	1.61	[null]	11.99
8	10759	ANATR	1997-11-28	11.99	1.61	39.92
9	10926	ANATR	1998-03-04	39.92	11.99	43.9
10	10625	ANATR	1997-08-08	43.9	39.92	[null]
11	10677	ANTON	1997-09-22	4.03	[null]	15.64
12	10535	ANTON	1997-05-13	15.64	4.03	22
13	10365	ANTON	1996-11-27	22	15.64	36.13

3. Show products and their price categories, product count in each category, avg price:

(HINT:

· Create a CTE which should have price_category definition:

WHEN unit_price < 20 THEN 'Low Price'

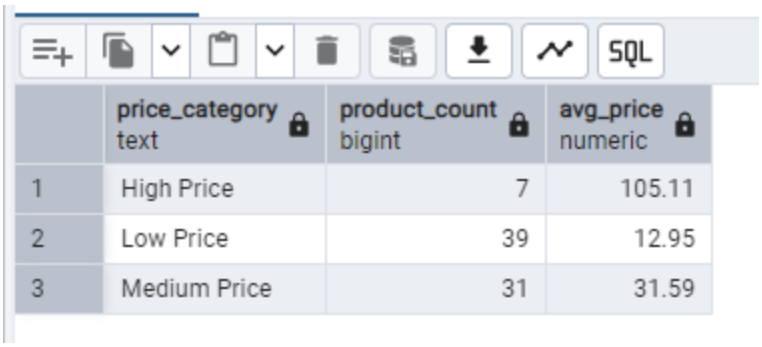
WHEN unit_price < 50 THEN 'Medium Price'

ELSE 'High Price'

· In the main query display: price_category, product_count in each price_category, ROUND(AVG(unit_price)::numeric, 2) as avg_price)

```
WITH cte_price_category As(
SELECT product_id,product_name, unit_price,
CASE
        WHEN unit_price < 20 THEN 'Low Price'
   WHEN unit_price < 50 THEN 'Medium Price'
   ELSE 'High Price'
END AS price_category
FROM products
)

select price_category,
count(*) as product_count,
ROUND(AVG(unit_price)::numeric, 2) as avg_price
from cte_price_category
group by price_category
order by price_category;
```



	price_category text	product_count bigint	avg_price numeric
1	High Price	7	105.11
2	Low Price	39	12.95
3	Medium Price	31	31.59