Comprehensive Bike Sales Analysis

By Chirag Sharma

1. How many units of Bikes were sold in each country per year?

```
Query History

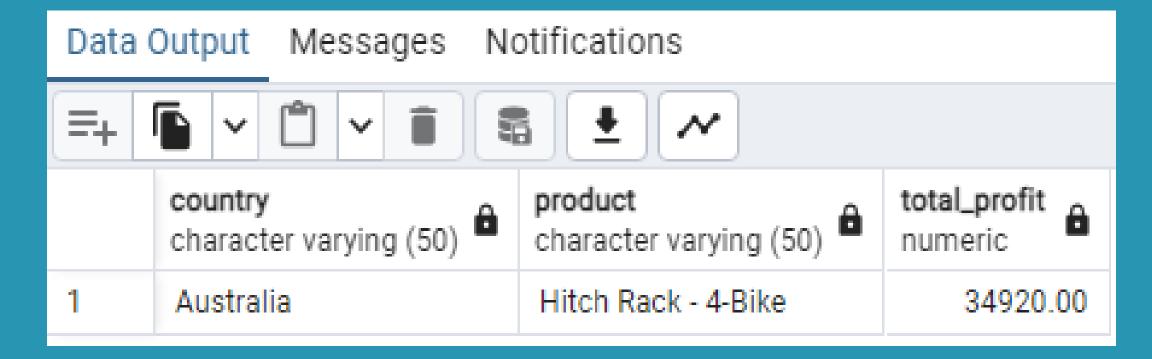
1 v select *, rank()over(partition by year order by total_units) as ranks from
2 (select country, year, sum(order_quantity) as Total_units
3 from sales
4 group by 1,2)as d
5
```

Data Output Messages Notifications					
=+					
	country character varying (50)	year integer	total_units bigint	ranks bigint	
1	Canada	2011	429	1	
2	France	2011	458	2	
3	Germany	2011	463	3	
4	United Kingdom	2011	538	4	
5	United States	2011	1665	5	
6	Australia	2011	1707	6	
7	Canada	2012	452	1	
8	France	2012	466	2	
9	Germany	2012	466	2	
10	United Kingdom	2012	530	4	
11	Australia	2012	1718	5	
12	United States	2012	1722	6	
13	Germany	2013	25547	1	
14	France	2013	27098	2	
15	United Kingdom	2013	34397	3	
-41 /	0	2012	40006		

2. What is the total profit made from "Hitch Rack - 4-Bike" sales in Australia?

```
Query Query History

1 v select country, product, sum(profit) as Total_profit
2 from sales
3 where product = 'Hitch Rack - 4-Bike' and
4 country = 'Australia'
5 group by 1,2
6
7
```



3. Find the top 5 states that generated the highest revenue for "Mountain-500 Silver, 52" in 2015.

Data Output Messages Notifications					
=+ □					
	state character varying (50)	product character varying (50)	total_revenue numeric		
1	Victoria	Mountain-500 Silver, 52	2678.00		
2	British Columbia	Mountain-500 Silver, 52	2237.00		
3	Hessen	Mountain-500 Silver, 52	1576.00		
4	New South Wales	Mountain-500 Silver, 52	1476.00		
5	Seine et Marne	Mountain-500 Silver, 52	927.00		

4. What is the average order quantity of "Hitch Rack - 4-Bike "across different age groups?

```
Query Query History

1 v select age_group,
2 round(avg(order_quantity),0) as avg_units
3 from sales
4 where product = 'Hitch Rack - 4-Bike'
5 group by 1
6
```

Data (Output Messages Notifications
=+	
	age_group character varying (20) avg_units numeric
1	Adults (35-64) 9
2	Seniors (64+)
3	Young Adults (25-34) 8
4	Youth (<25) 6

5. List the total revenue generated by each gender in each year.

```
Query Query History

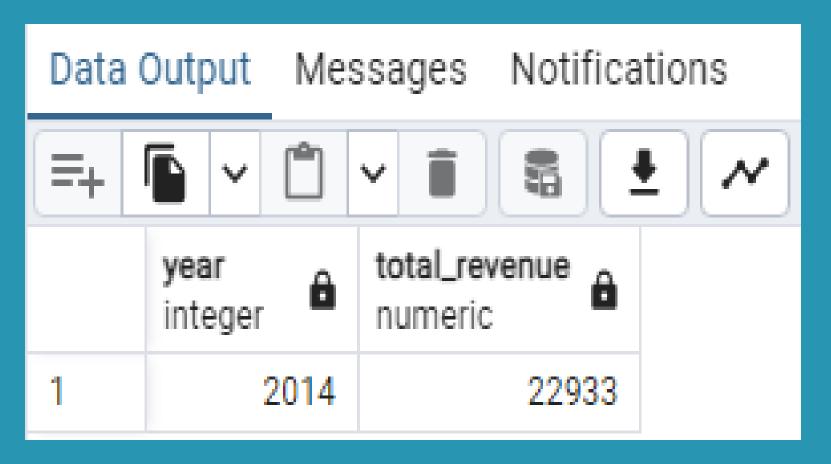
1 v select *,
2 rank()over(partition by year order by total_revenue) as ranks from
3 (select customer_gender, year,
4 sum(revenue) as Total_revenue
5 from sales
6 group by 1,2)as d
```

Data Output Messages Notifications				
=+ [\$	~	
	customer_gender character	year integer	total_revenue numeric	ranks bigint
1	M	2011	4328877.00	1
2	F	2011	4636011.00	2
3	M	2012	4417196.00	1
4	F	2012	4758787.00	2
5	M	2013	7587629.00	1
6	F	2013	7652408.00	2
7	F	2014	6570887.00	1
8	M	2014	7581837.00	2
9	M	2015	9969505.00	1
10	F	2015	10054486.00	2
4.4	_	2016	000000000	-1

6. Identify the year with the highest total sales in terms of revenue for "Racing Socks, M"

```
Query Query History

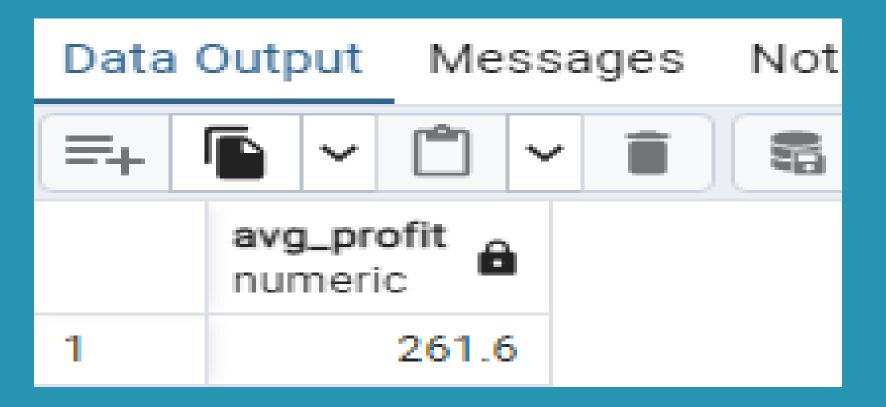
1 v select year, round(sum(revenue),0) as Total_revenue
2 from sales
3 where product = 'Racing Socks, M'
4 group by 1
5 order by 2 desc
6 limit 1
```



7. Calculate the average profit per transaction for sales made in British Columbia.

```
Query Query History

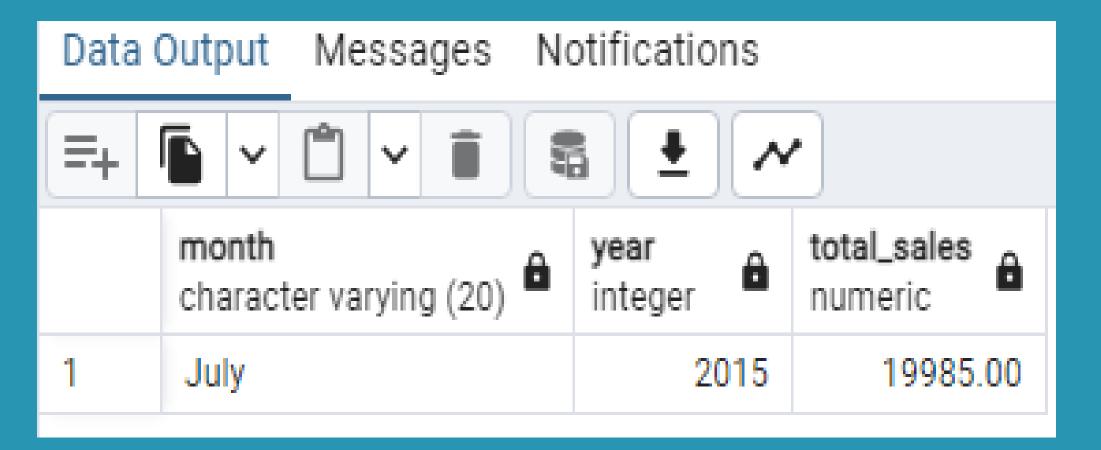
1 v select round(avg(profit),1) as Avg_profit
2 from sales
3 where state = 'British Columbia'
4
```



8. Find the month and year combination with the lowest sales for " "Sport-100 Helmet, Blue"."

```
Query Query History

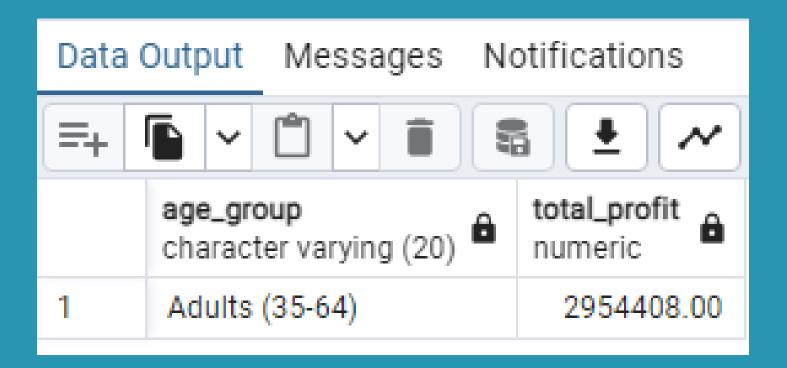
1 v select month, year, sum(unit_price*order_quantity) as Total_Sales
2 from sales
3 where product = 'Sport-100 Helmet, Blue'
4 group by 1,2
5 order by 3
6 limit 1
7
```



9. Determine the customer age group that contributed the highest total profit in Australia.

```
Query Query History

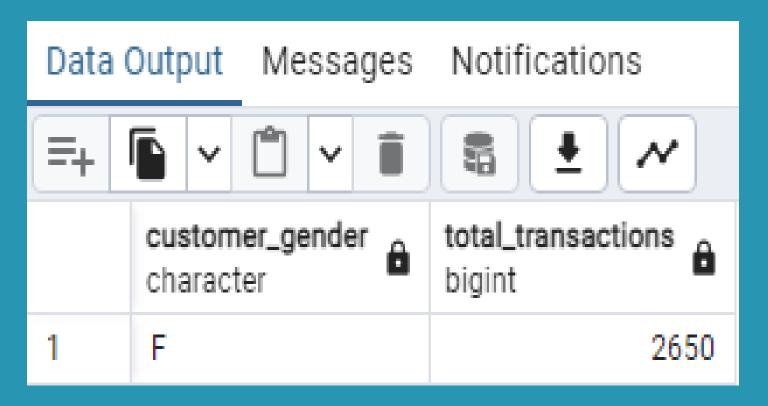
1 v select age_group, sum(profit) as Total_profit
2 from sales
3 where country = 'Australia'
4 group by 1
5 order by 2 desc
6 limit 1
```



10. How many transactions were made by female customers in Victoria?

```
Query Query History

1 v select customer_gender,
2 count(*) as Total_transactions
3 from sales
4 where customer_gender = 'F'
5 and state = 'Victoria'
6 group by 1
7
```



11. Calculate the total cost of "Fender Set - Mountain" units sold in each state.

```
Query Query History

1 v select state, sum(unit_cost) as Total_cost
2  from sales
3  where product = 'Fender Set - Mountain'
4  group by 1
5  order by 2 desc
6
```

Data	Output Messages Notifications		
=+			
	state character varying (50) total_cost numeric		
1	California 8416.00		
2	British Columbia 5968.00		
3	Washington 4160.00		
4	England 2304.00		
5	New South Wales 2096.00		
6	Oregon 2096.00		
7	Victoria 1248.00		
8	Queensland 1152.00		
9	Saarland 688.00		
10	Nordrhein-Westfalen 608.00		
11	Hamburg 464.00		

12. Find the percentage contribution of each country's sales to the overall revenue.

```
Query Usery History

1 v select country,
2   round((sum(unit_price*order_quantity)/(select sum(revenue) from sales))*100,1) as percentage_contribution

from sales
group by 1
```

Data Output Messages Notifications			
=+			
	country character varying (50)	percentage_contribution numeric	
1	France	11.5	
2	United States	36.1	
3	Australia	29.8	
4	Germany	11.7	
5	United Kingdom	13.0	
6	Canada	9.4	

13. What is the total number of transactions made by customers younger than 25?

```
Query Query History

1 v select count(*) as Total_transactions
2 from sales
3 where customer_age > 25
4
```



14. List the top 3 months with the highest number of orders for "Hitch Rack - 4-Bike."

```
Query Query History

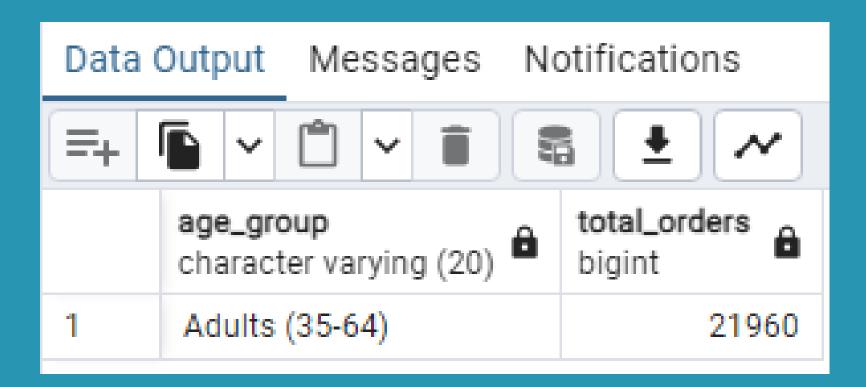
1 v select month, count(*) As Total_orders
2 from sales
3 where product = 'Hitch Rack - 4-Bike'
4 group by 1
5 order by 2 desc
6 limit 3
```

Data	Data Output Messages No		Noti	otifications		
=+		<u> </u>		8	•	
	month charact	er varyin	g (20)	h t	otal_ord	ders
1	May					80
2	September				66	
3	June			54		

15. Identify the customer age group that placed the largest number of orders in United States.

```
Query Query History

1 v select age_group, count(*) as Total_orders
2 from sales
3 where country = 'United States'
4 group by 1
5 order by 2 desc
6 limit 1
```



16. Calculate the average unit cost and unit price of "Touring-2000 Blue, 46" for each year.

```
Query Query History

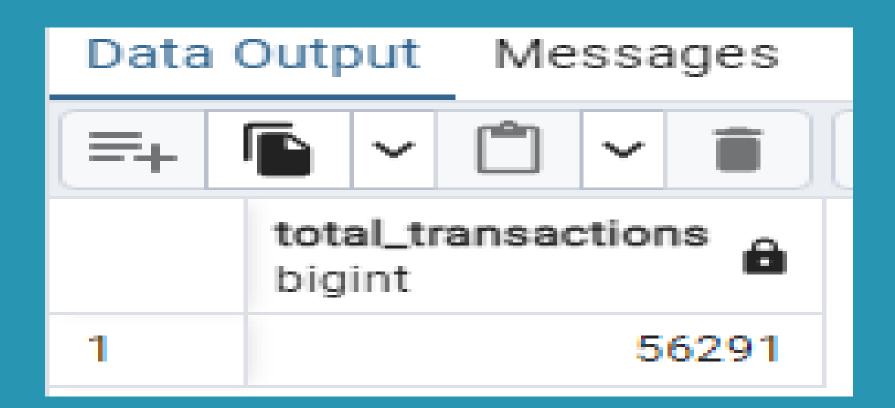
1 v select year, round(avg(unit_cost),0) as avg_unit_cost,
2 round(avg(unit_price),0) as avg_unit_price
3 from sales
4 where product = 'Touring-2000 Blue, 46'
5 group by 1
```

Data (Output Mes	sages Notifica	tions
=+		~ i	<u> </u>
	year integer	avg_unit_cost numeric	avg_unit_price numeric
1	2013	755	1215
2	2014	755	1215
3	2015	755	1215
4	2016	755	1215

17. Find the total number of transactions where the order quantity was greater than 10.

```
Query Query History

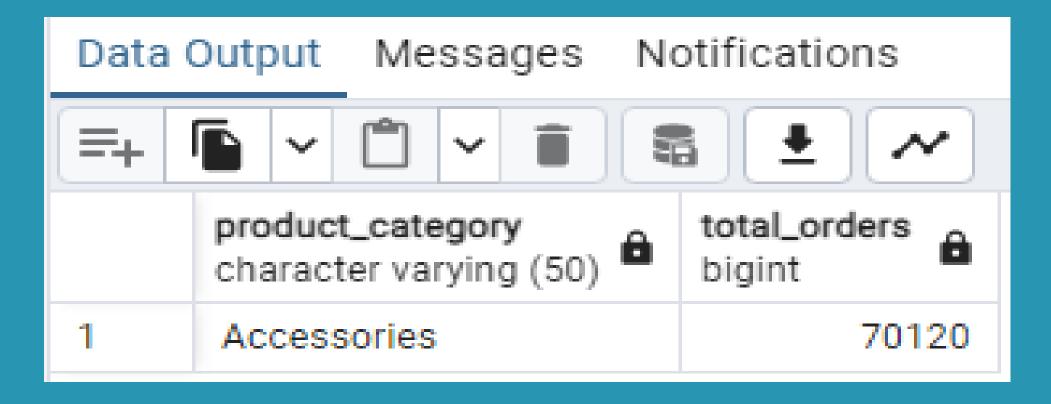
1 v select count(*) as Total_transactions
2 from sales
3 where order_quantity > 10
4
```



18. Which Product Category has the Highest Number of Orders

```
Query Query History

1 v select product_category, count(*) as Total_orders
2 from sales
3 group by 1
4 order by 2 desc
5 limit 1
```



Thank You