

# **Comprehensive Bike Sales Analysis**

By Chirag Sharma

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

Query Query History

```
1 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	
16	Canada	2013	42226	4	

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

Query   Query History

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

Data Output   Messages   Notifications			
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	country character varying (50)	product character varying (50)	total_profit numeric
1	Australia	Hitch Rack - 4-Bike	34920.00

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

QueryQuery History

12345678

```
select state, product,
sum(revenue) as Total_revenue
from sales
where product = 'Mountain-500 Silver, 52' and
year = '2015'
group by 1,2
order by 3 desc
limit 5
```

Data OutputMessagesNotifications			
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	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?

QueryQuery History

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

Data Output

Messages

Notifications

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	<div>age_group</div> <div>character varying (20)</div> <div></div>	<div>avg_units</div> <div>numeric</div> <div></div>
1	Adults (35-64)	9
2	Seniors (64+)	2
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 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	
11	F	2016	9969999.00	1	

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

QueryQuery History

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

Data Output			Messages	Notifications
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	<div>year</div> <div>integer</div> <div>🔒</div>	<div>total_revenue</div> <div>numeric</div> <div>🔒</div>		
1	2014	22933		

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

Query   Query History

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

Data Output		Messages	Not
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	avg_profit numeric		
1	261.6		



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

QueryQuery History

```
1 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
```

Data Output

Messages

Notifications

	month character varying (20)	year integer	total_sales numeric
1	July	2015	19985.00

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

QueryQuery History

```
1  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
```

Data Output

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	age_group character varying (20) 🔒	total_profit numeric 🔒
1	Adults (35-64)	2954408.00

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

Query	Query History
1	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	

Data Output		Messages	Notifications
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	customer_gender character	total_transactions bigint	
1	F		2650

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

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

Data Output		Messages	Notifications
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	<div><div>state</div><div>character varying (50)</div><div></div></div>	<div><div>total_cost</div><div>numeric</div><div></div></div>	
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 Query History

```
1 select country,
2 round((sum(unit_price*order_quantity)/(select sum(revenue) from sales))*100,1) as percentage_contribution
3 from sales
4 group by 1
5
```

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?

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```
select count(*) as Total_transactions
from sales
where customer_age > 25
|
```

Data Output		Messages
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	<div>total_transactions</div> <div>bigint</div>	
1	92158	

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

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

Data Output

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	<div><div>month</div><div>character varying (20)</div><div>🔒</div></div>	<div><div>total_orders</div><div>bigint</div><div>🔒</div></div>
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.

QueryQuery History

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

Data Output			Messages	Notifications
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	<div><div>age_group</div><div>character varying (20)</div><div>🔒</div></div>	<div><div>total_orders</div><div>bigint</div><div>🔒</div></div>		
1	Adults (35-64)	21960		



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

Query Query History

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

Data Output					Messages		Notifications	
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	year	avg_unit_cost	avg_unit_price					
	integer	numeric	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	select count(*) as Total_transactions
2	from sales
3	where order_quantity > 10
4	

Data Output		Messages
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	total_transactions bigint	
1	56291	

# 18. Which Product Category has the Highest Number of Orders

Query    Query History

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

Data Output

Messages

Notifications

	<div>product_category</div> <div>character varying (50)</div> <div></div>	<div>total_orders</div> <div>bigint</div> <div></div>
1	Accessories	70120

**Thank  
You**