

## Questions

Enter your question here:

What are the top 10 revenue-  
generating customers for January  
2023?



ENTER 

Show Query History



# Query 1

**Question:** generate a query month wise total revenues

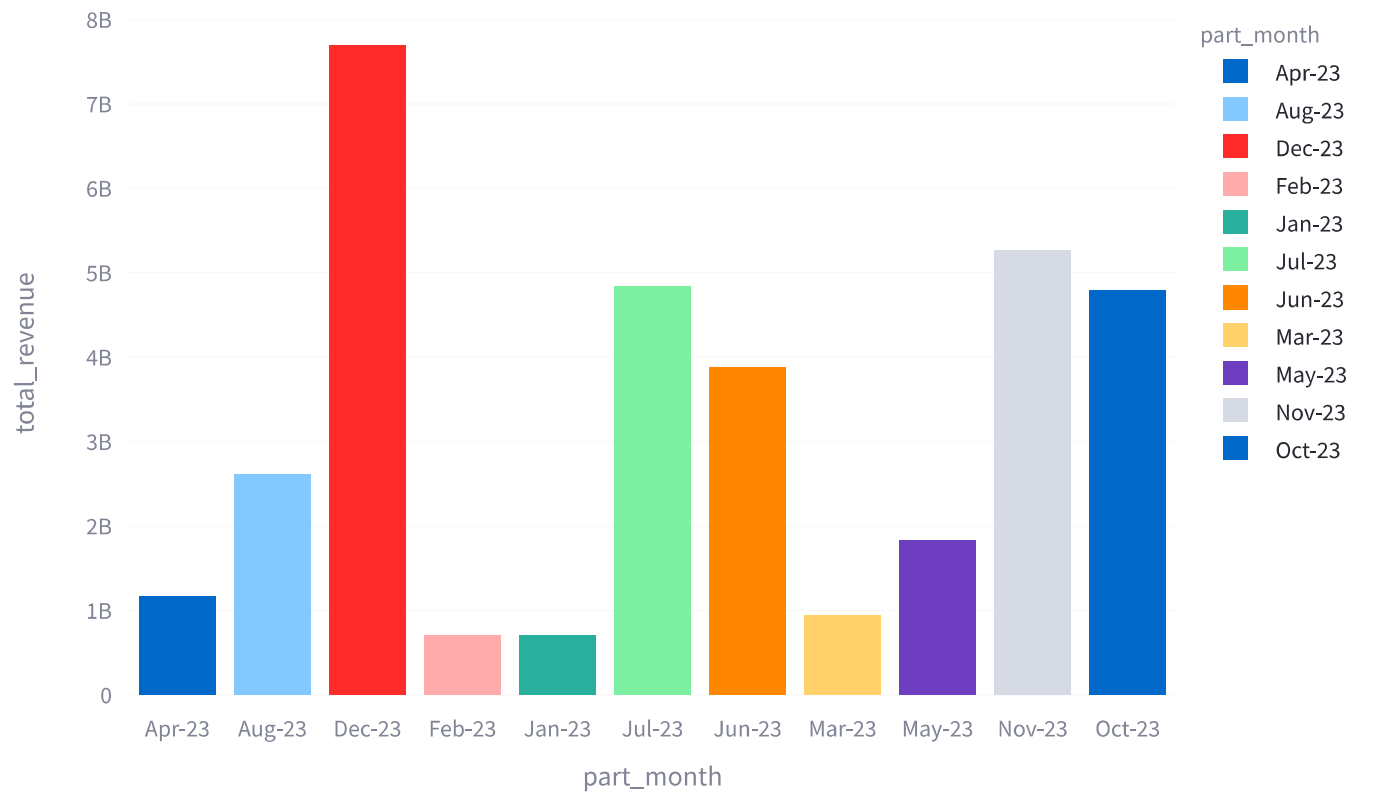
**SQL Query:** SELECT t.part\_month, SUM(t.total\_revenue) AS total\_revenue FROM telecom\_data\_v3 t GROUP BY t.part\_month ORDER BY t.part\_month NULLS LAST;

**Query Result:**

	part_month	total_revenue
0	Apr-23	1,171,623,107.5886
1	Aug-23	2,610,276,294.9183
2	Dec-23	7,690,055,526.0974
3	Feb-23	708,401,723.423
4	Jan-23	706,426,840.2818
5	Jul-23	4,831,876,930.2334
6	Jun-23	3,873,861,301.5181
7	Mar-23	941,661,361.6282
8	May-23	1,826,997,660.0664
9	Nov-23	5,266,625,455.3082

**Result:**

total\_revenue by part\_month



# Query 2

**Question:** List the top 10 customers based on total revenue for the month dec-23

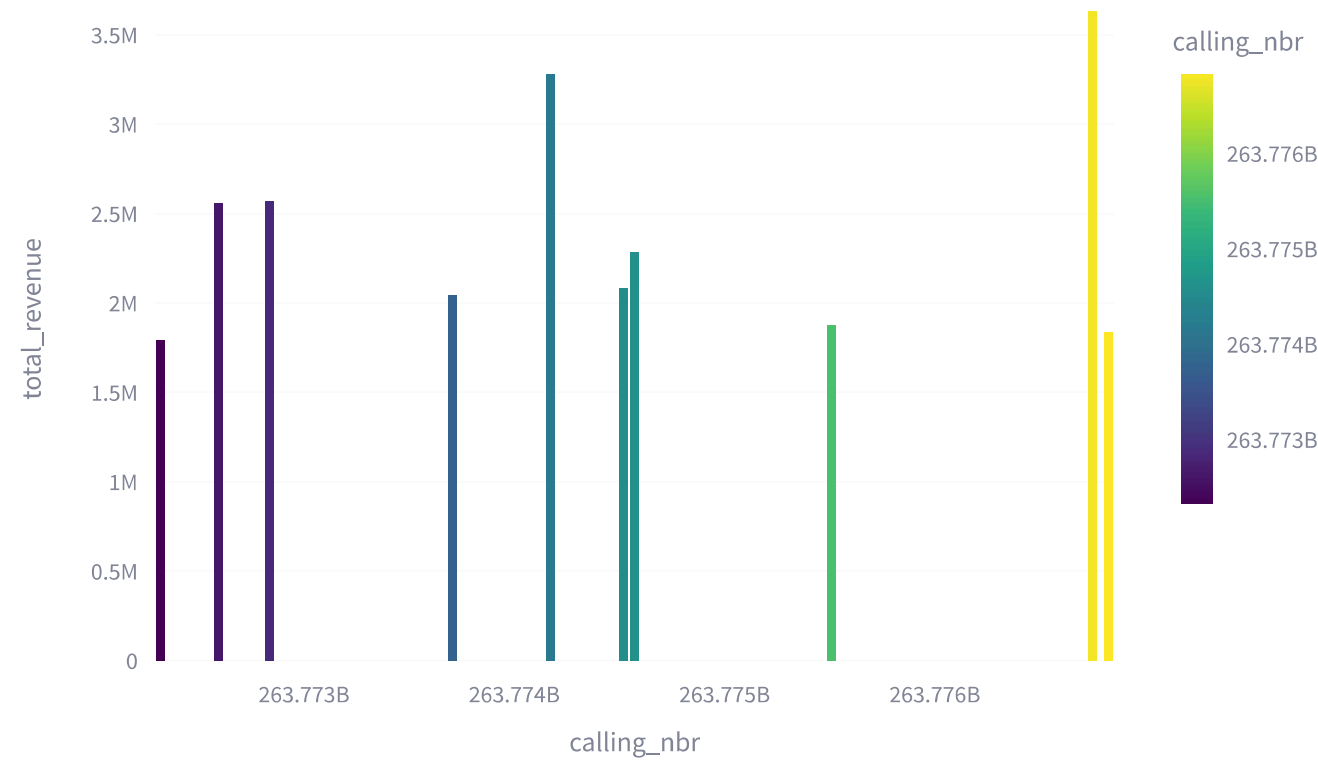
```
SQL Query: SELECT t.calling_nbr, t.total_revenue FROM telecom_data_v3 t WHERE t.part_month = 'Dec-23' ORDER BY t.total_revenue DESC LIMIT 10;
```

**Query Result:**

	calling_nbr	total_revenue
0	263,776,747,074	3,631,220.886
1	263,774,173,144	3,282,338.944
2	263,772,836,420	2,572,572.282
3	263,772,594,468	2,561,008.512
4	263,774,570,361	2,284,255.561
5	263,774,521,553	2,081,260.183
6	263,773,707,273	2,041,544.67
7	263,775,508,834	1,877,905.498
8	263,776,825,879	1,838,433.028
9	263,772,319,482	1,793,597.498

Result:

total\_revenue by calling\_nbr



# Query 3

**Question:** What is the total revenue generated in each geographic region?

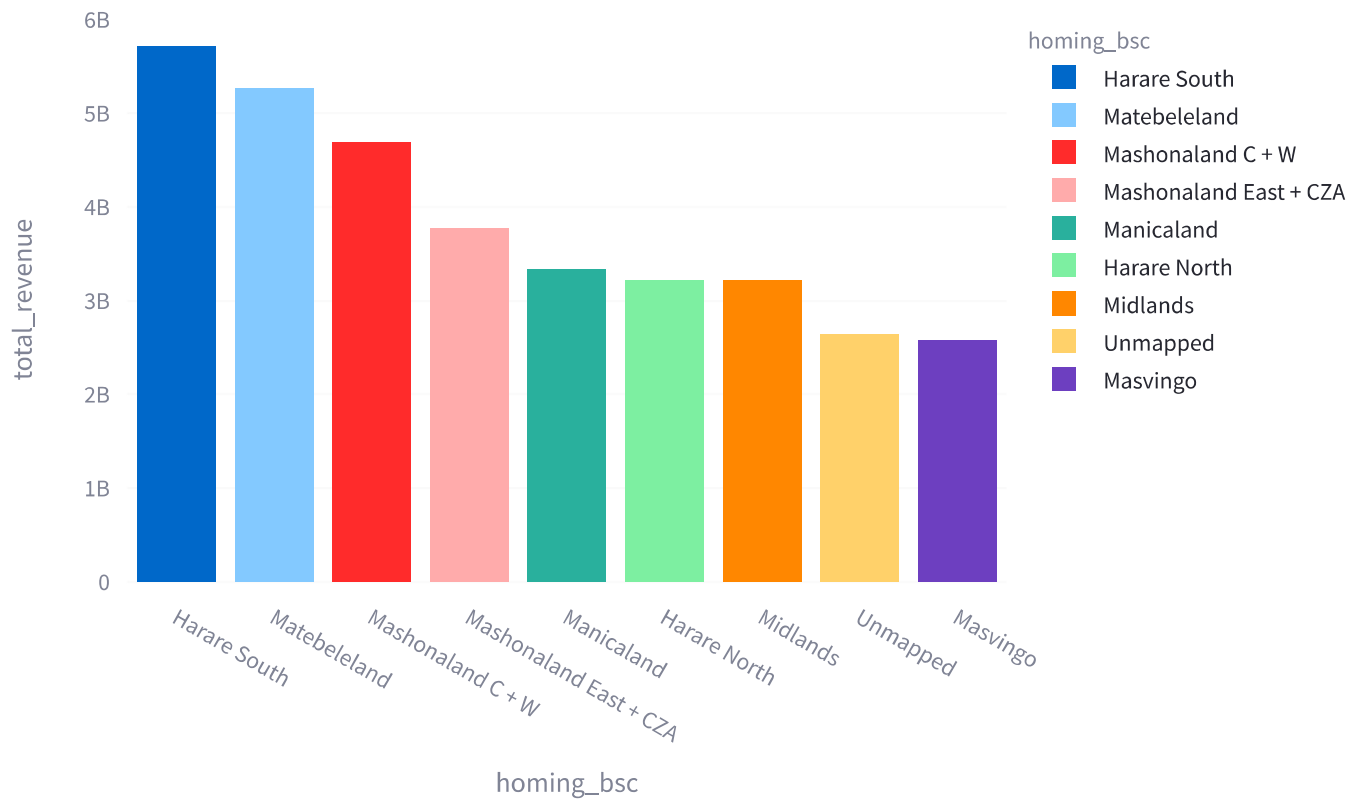
**SQL Query:** SELECT t.homing\_bsc, SUM(t.total\_revenue) AS total\_revenue FROM telecom\_data\_v3 t GROUP BY t.homing\_bsc ORDER BY total\_revenue DESC NULLS LAST;

**Query Result:**

	homing_bsc	total_revenue
0	Harare South	5,719,153,904.2338
1	Matebeleland	5,266,412,536.0632
2	Mashonaland C + W	4,684,705,256.4287
3	Mashonaland East + CZA	3,773,228,283.7695
4	Manicaland	3,334,284,493.1371
5	Harare North	3,214,697,414.6082
6	Midlands	3,209,206,545.3152
7	Unmapped	2,643,800,079.3425
8	Masvingo	2,572,429,991.8271

**Result:**

### total\_revenue by homing\_bsc



## Query 4

**Question:** take 10 customers and Segment them into high, medium, and low revenue groups based on their total revenue for the month dec-23 . Use percentile categories for segmentation.

**SQL Query:** SELECT t.calling\_nbr, t.plan\_code, t.data\_volume\_gb, t.data\_revenue, t.voice\_usage\_mins, t.voice\_revenue, t.sms\_total\_msgs, t

### Query Result:



### Result:

No data to display.

# Query 5

**Question:** How does the average data usage vary across different plans?

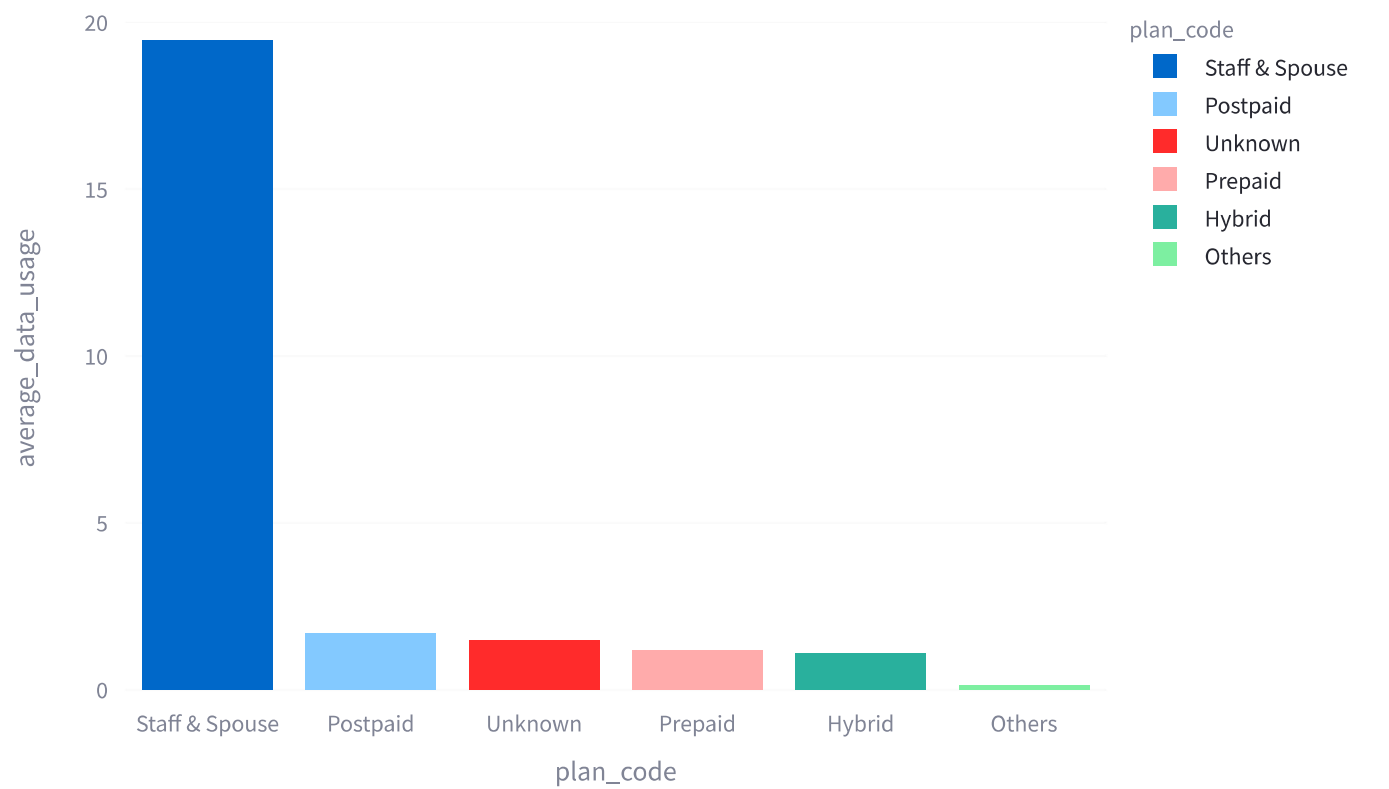
**SQL Query:** SELECT t.plan\_code, AVG(t.data\_volume\_gb) AS average\_data\_usage FROM telecom\_data\_v3 t GROUP BY t.plan\_code ORDER BY average\_data\_usage DESC NULLS LAST;

**Query Result:**

	plan_code	average_data_usage
0	Staff & Spouse	19.4566
1	Postpaid	1.6884
2	Unknown	1.4847
3	Prepaid	1.182
4	Hybrid	1.0865
5	Others	0.0614

**Result:**

average\_data\_usage by plan\_code



# Query 6

**Question:** Which device type contributes the most to the overall revenue?

**SQL Query:** SELECT t.device\_type, SUM(t.total\_revenue) AS total\_revenue FROM telecom\_data\_v3 t GROUP BY t.device\_type ORDER BY total\_revenue DESC LIMIT 1;

**Query Result:**

	device_type	total_revenue
0	Smartphone	27,959,100,011.647

**Result:**



### total\_revenue by device\_type



## Query 7

**Question:** take 20 mssidn randomly where month is dec-23 and Can you rank customers based on their total revenue in descending order?

**SQL Query:** `SELECT t.msisdn_cnt, t.plan, t.homing_bsc, t.total_revenue FROM telecom_data_v3 t WHERE t.part_month = 'Dec-23' ORDER BY t.total_revenue DESC NULLS LAST LIMIT 20;`

**Query Result:**



**Result:**

No data to display.

## Query 8

**Question:** How many customers fall within each revenue quartile? where month is dec-23

**SQL Query:** SELECT t.part\_month, percentile\_cont(0.25) within GROUP ( ORDER BY t.total\_revenue) AS q1, percentile\_cont(0.75) within GROUP ( ORDER BY t.total\_revenue) AS q3 FROM telecom\_data\_v3 t WHERE t.part\_month = 'Dec-23' GROUP BY t.part\_month;

**Query Result:**



**Result:**

No data to display.

## Query 9

**Question:** Rank the device types by total data volume usage in January 2023.

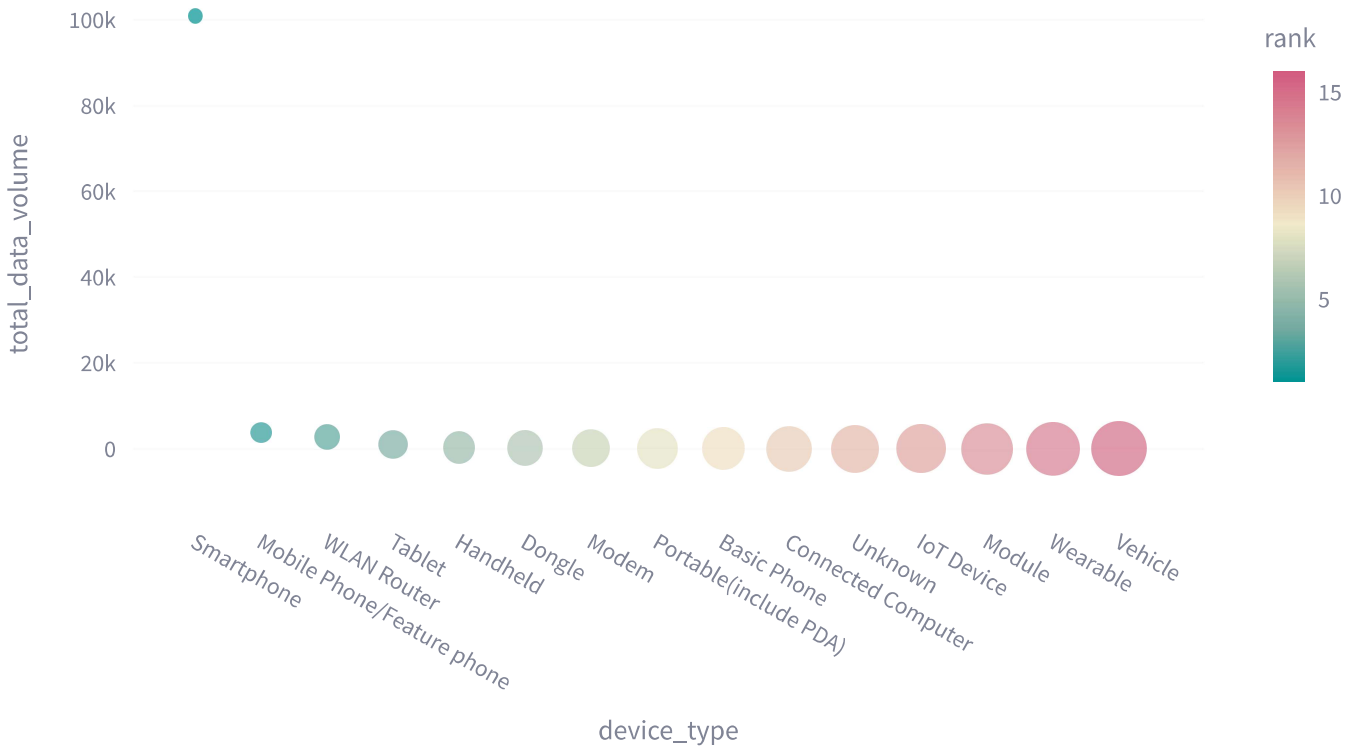
**SQL Query:** SELECT t.device\_type, SUM(t.data\_volume\_gb) AS total\_data\_volume, RANK() OVER ( ORDER BY SUM(t.data\_volume\_gb) DESC) AS rank FROM telecom\_data\_v3 t WHERE t.part\_month = 'Jan-23' GROUP BY t.device\_type ORDER BY total\_data\_volume DESC;

**Query Result:**

	device_type	total_data_volume	rank
0	Smartphone	100,877.691	1
1	Mobile Phone/Feature p	3,829.9881	2
2	WLAN Router	2,735.1313	3
3	Tablet	1,018.3082	4
4	Handheld	259.3554	5
5	Dongle	164.9965	6
6	Modem	87.8037	7
7	Portable(include PDA)	32.7442	8
8	Basic Phone	11.9962	9
9	Connected Computer	10.8301	10

Result:

total\_data\_volume by device\_type and Bubble Size by rank



# Query 10

**Question:** Rank the geographic regions by total revenue in January 2023

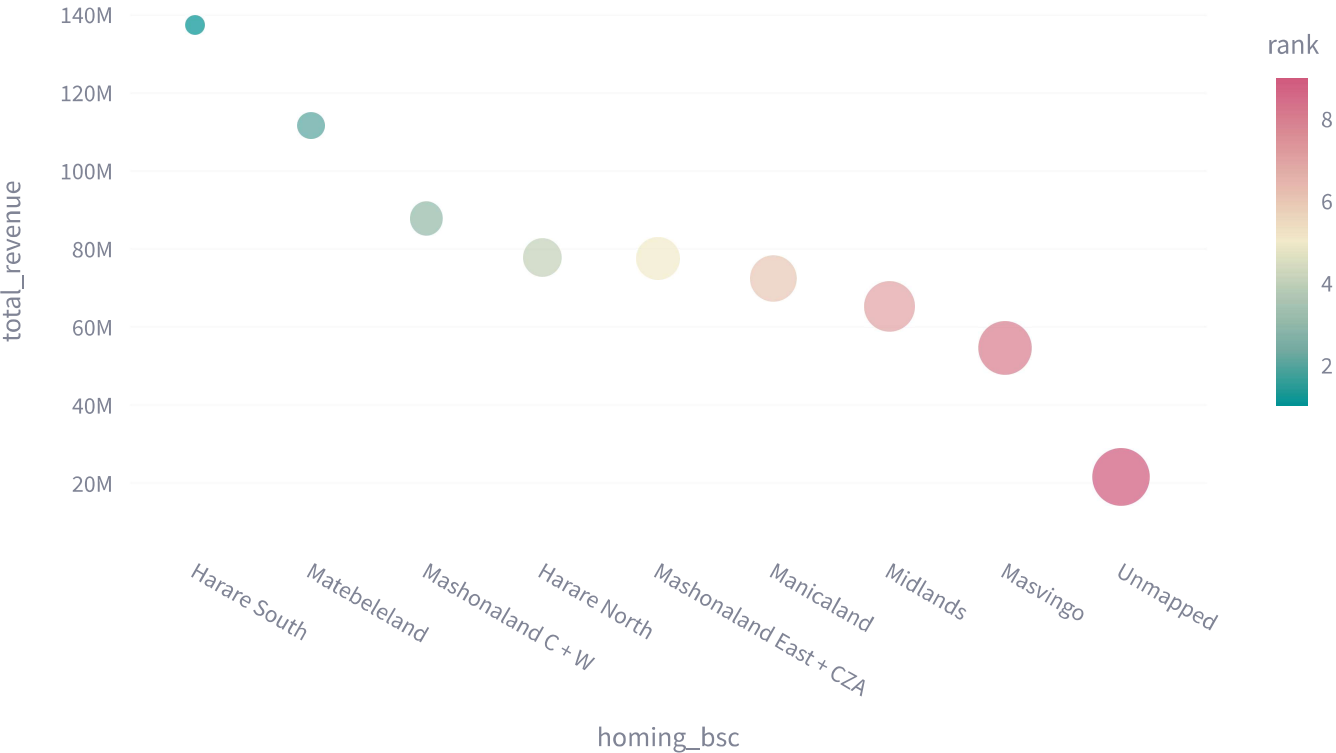
**SQL Query:** SELECT t.homing\_bsc, SUM(t.total\_revenue) AS total\_revenue, RANK() OVER ( ORDER BY SUM(t.total\_revenue) DESC) AS rank FROM telecom\_data\_v3 t WHERE t.part\_month = 'Jan-23' GROUP BY t.homing\_bsc ORDER BY total\_revenue DESC;

**Query Result:**

	homing_bsc	total_revenue	rank
0	Harare South	137,318,074.2393	1
1	Matebeleland	111,636,718.4863	2
2	Mashonaland C + W	87,786,717.5242	3
3	Harare North	77,894,916.4566	4
4	Mashonaland East + CZA	77,527,711.6731	5
5	Manicaland	72,525,980.6348	6
6	Midlands	65,211,605.4476	7
7	Masvingo	54,785,456.1584	8
8	Unmapped	21,739,659.6616	9

**Result:**

total\_revenue by homing\_bsc and Bubble Size by rank



## Query 11

**Question:** Rank the customer segments based on the adoption rate of 4G technology in december 2023.

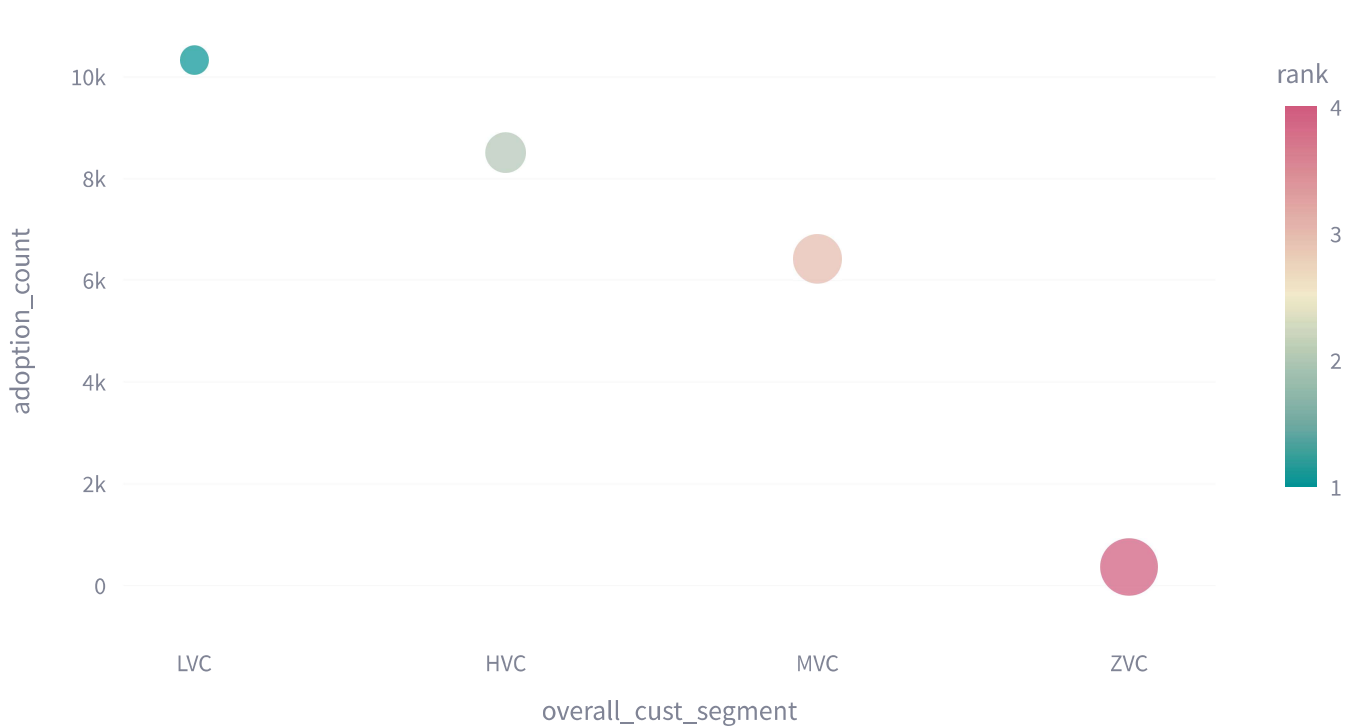
**SQL Query:** `SELECT t.overall_cust_segment, COUNT() AS adoption_count, rank() OVER ( ORDER BY COUNT() DESC) AS rank FROM telecom_data_v3 t WHERE t.part_month = 'Dec-23' AND t.subs_max_tech = '4G' GROUP BY t.overall_cust_segment ORDER BY rank NULLS LAST;`

**Query Result:**

	overall_cust_segment	adoption_count	rank
0	LVC	10,327	1
1	HVC	8,513	2
2	MVC	6,420	3
3	ZVC	360	4

Result:

### adoption\_count by overall\_cust\_segment and Bubble Size by rank



## Query 12

**Question:** Rank the customer segments based on the adoption rate of 3G technology in january 2023.

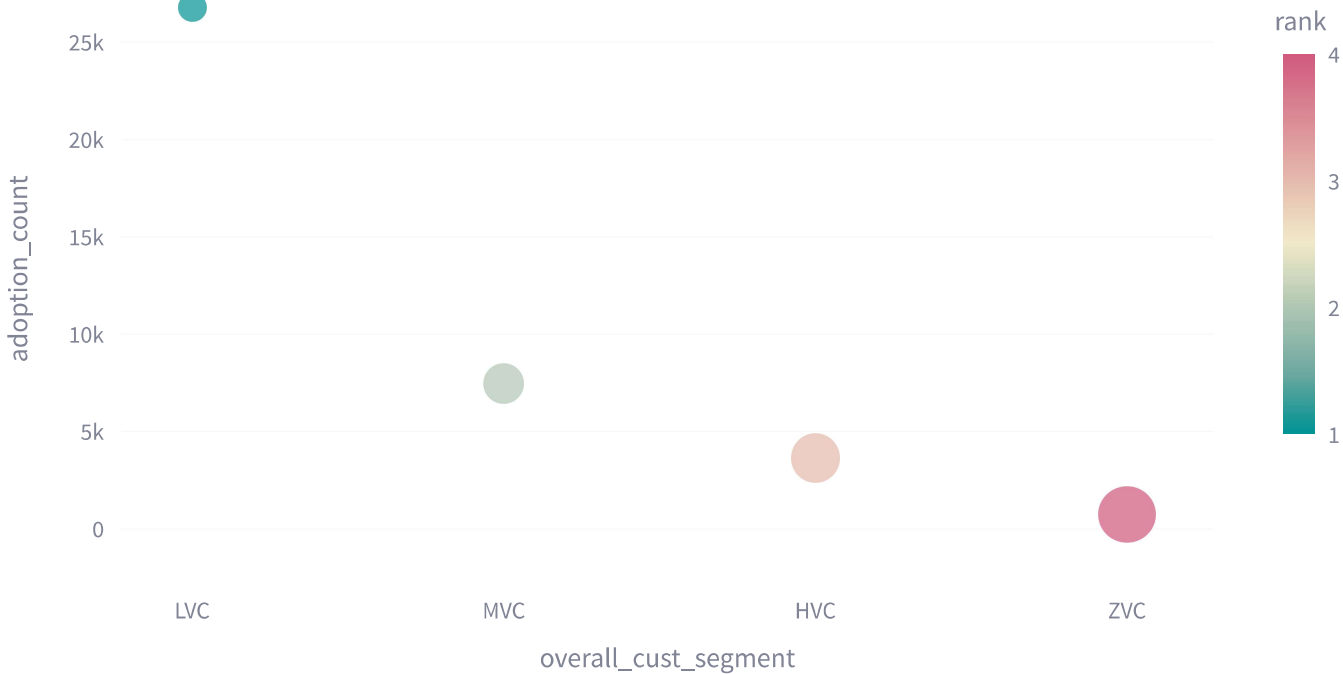
**SQL Query:** `SELECT t.overall_cust_segment, COUNT() AS adoption_count, RANK() OVER ( ORDER BY COUNT() DESC) AS rank FROM telecom_data_v3 t WHERE t.part_month = 'Jan-23' AND t.subs_max_tech = '3G' GROUP BY t.overall_cust_segment ORDER BY rank NULLS LAST;`

**Query Result:**

	overall_cust_segment	adoption_count	rank
0	LVC	26,790	1
1	MVC	7,481	2
2	HVC	3,647	3
3	ZVC	736	4

Result:

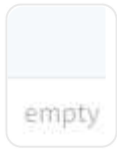
adoption\_count by overall\_cust\_segment and Bubble Size by rank



## Query 13

**Question:** Who are the top 10 SMS users in January 2023, and how do they rank in terms of total revenue?

**SQL Query:** `SELECT msisdn, rank() OVER ( ORDER BY total_revenue DESC) AS rank, dense_rank() OVER (PARTITION BY homing_bsc ORDER BY total_revenue DESC) AS rank_per_region FROM telecom_data_v3 WHERE revenue_segment = 'SMS' AND part_month = 'Jan-23' ORDER BY rank LIMIT 1`

**Query Result:****Result:**

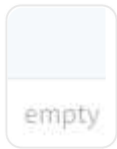
No data to display.

---

## Query 14

**Question:** Rank the top 10 customers in december 2023 , based on adoption rate of 4G technology and total revenue?

**SQL Query:** SELECT t.calling\_nbr, t.total\_revenue, t.subs\_max\_tech, rank() OVER (PARTITION BY t.calling\_nbr ORDER BY t.total\_revenue DESC) AS rank FROM telecom\_data\_v3 t WHERE t.part\_month = 'Dec-23' ORDER BY rank NULLS LAST LIMIT

**Query Result:****Result:**

No data to display.

---

## Query 15

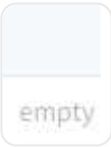
**Question:** Rank the customer segments based on voice revenue and data revenue separately for February 2023.

**SQL Query:** SELECT t.overall\_cust\_segment, t.voice\_revenue, t.data\_revenue, rank() OVER (PARTITION BY t.overall\_cust\_segment ORDER BY t.voice\_revenue DESC, t.data\_revenue DESC) AS rank FROM



```
telecom_data_v3 t WHERE t.part_month = 'Feb-23' ORDER BY t.overall_cust_segment, rank NULL
```

Query Result:



Result:

No data to display.

# Query 16

Question: What are the top 10 revenue-generating customers for January 2023?

```
SQL Query: SELECT t.calling_nbr, t.total_revenue FROM telecom_data_v3 t WHERE t.part_month = 'Jan-23' ORDER BY t.total_revenue DESC LIMIT 10;
```

Query Result:

	calling_nbr	total_revenue
0	263,772,914,705	361,227.9379
1	263,776,556,155	335,030.2636
2	263,781,334,405	301,112.5991
3	263,774,140,642	266,667.328
4	263,772,251,175	265,903.4667
5	263,781,279,855	199,446.9325
6	263,772,876,375	191,390.1805
7	263,772,742,216	189,149.101
8	263,777,615,296	184,998.4763
9	263,773,275,358	180,628.2556

Result:

total\_revenue by calling\_nbr

