Diagram

Description automatically generated

1. Provide the **name** of the **sales\_rep** in each **region** with the largest amount of **total\_amt\_usd** sales.

WITH s1 AS

(SELECT s.name sales\_rep,

r.name region,

SUM(o.total\_amt\_usd) total\_amt

FROM region r

JOIN sales\_reps s

ON r.id=s.region\_id

JOIN accounts a

ON s.id=a.sales\_rep\_id

JOIN orders o

ON o.account\_id=a.id

GROUP BY 1,2

ORDER BY 3 DESC),

S2 AS

(SELECT

region,

MAX(total\_amt) max\_sales

FROM s1

GROUP BY 1)

SELECT

s1.sales\_rep,

s1.region,

s2.max\_sales

FROM

s2

JOIN s1 on s2.region=s1.region and s1.total\_amt=s2.max\_sales;

1. For the region with the largest sales **total\_amt\_usd**, how many **total** orders were placed?

WITH s1 AS

(SELECT

r.name region,

SUM(o.total\_amt\_usd) largest\_sales

FROM orders o

JOIN accounts a

ON o.account\_id=a.id

JOIN sales\_reps s

ON s.id=a.sales\_rep\_id

JOIN region r

ON r.id=s.region\_id

GROUP BY 1

ORDER BY 2 DESC),

s2 AS

(SELECT MAX(largest\_sales)

FROM s1)

SELECT

r.name,

COUNT(\*) num\_orders

FROM orders o

JOIN accounts a

ON o.account\_id=a.id

JOIN sales\_reps s

ON s.id=a.sales\_rep\_id

JOIN region r

ON r.id=s.region\_id

GROUP BY 1

HAVING SUM(o.total\_amt\_usd)=(SELECT \* FROM s2)

1. **How many accounts** had more **total** purchases than the account **name** which has bought the most **standard\_qty** paper throughout their lifetime as a customer?

WITH s1 AS

(SELECT

a.name account,

SUM(o.standard\_qty) standard\_qty,

SUM(o.total) total

FROM accounts a

JOIN orders o

ON a.id=o.account\_id

GROUP BY 1

ORDER BY 2 DESC

LIMIT 1),

s2 AS

(SELECT a.name,

SUM(o.total) total

FROM accounts a

JOIN orders o

ON a.id=o.account\_id

GROUP BY 1

HAVING SUM(o.total)>(SELECT total from s1))

SELECT COUNT(\*) from s2;

1. For the customer that spent the most (in total over their lifetime as a customer) **total\_amt\_usd**, how many **web\_events** did they have for each channel?

WITH s1 AS

(SELECT

a.name account,

SUM(o.total\_amt\_usd) total\_sales

FROM accounts a

JOIN orders o

ON a.id=o.account\_id

GROUP BY 1

ORDER BY 2 DESC

LIMIT 1),

s2 AS

(SELECT account from s1)

Select

a.name account,

w.channel channel,

COUNT(\*) num\_web\_events

FROM web\_events w

JOIN accounts a

ON w.account\_id=a.id

GROUP BY 1,2

HAVING a.name=(SELECT \* FROM s2)

ORDER BY num\_web\_events DESC

1. What is the lifetime average amount spent in terms of **total\_amt\_usd** for the top 10 total spending **accounts**?

WITH s1 AS

(SELECT

a.name accounts,

SUM(o.total\_amt\_usd) total

FROM accounts a

JOIN orders o

ON a.id=o.account\_id

GROUP BY 1

ORDER BY 2 DESC

LIMIT 10)

SELECT

AVG(total)

FROM s1;

1. What is the lifetime average amount spent in terms of **total\_amt\_usd**, including only the companies that spent more per order, on average, than the average of all orders.

WITH s1 AS

(SELECT

a.name accounts,

avg(o.total\_amt\_usd) avg\_orders

FROM accounts a

JOIN orders o

ON a.id=o.account\_id

GROUP BY 1

ORDER BY 2 DESC),

s2 AS

(SELECT

AVG(total\_amt\_usd) total

FROM orders)

SELECT avg(avg\_orders)

FROM

s1

WHERE avg\_orders> (SELECT total from s2);