

Parsen & Posey Requirements Sample

1. Provide the name of the sales rep. in each region with the largest amount of sales.
2. For the region with the largest sum of sales, how many total (count) orders were placed?
3. For the customer that spent the most (in total over their lifetime as a customer), how many web events did they have for each channel?
4. What is the lifetime average amount spent in terms of total amount of sales for the top 10 total spending accounts?

```
1  /* Q1 - Provide the name of the sales_rep in each region with the largest amount of total_amt_usd sales. */
2
3  SELECT t2.max_tot_sales, t2.region_name, t3.sr_name
4  FROM
5      (SELECT MAX(total_amt) max_tot_sales, region_name
6       FROM
7           (SELECT sum(o.total_amt_usd) as total_amt, sr.name sr_name, r.name region_name
8            from region r
9            join sales_reps sr
10             on r.id = sr.region_id
11            join accounts a
12             on a.sales_rep_id = sr.id
13            join orders o
14             on o.account_id = a.id
15            group by sr_name, region_name) t1
16       GROUP BY region_name) t2
17  JOIN
18      (SELECT sum(o.total_amt_usd) as total_amt, sr.name sr_name, r.name region_name
19       from region r
20       join sales_reps sr
21        on r.id = sr.region_id
22       join accounts a
23        on a.sales_rep_id = sr.id
24       join orders o
25        on o.account_id = a.id
26       group by sr_name, region_name) t3
27  on t2.max_tot_sales = t3.total_amt AND t2.region_name = t3.region_name
```

max_tot_sales	region_name	sr_name
675637.19	Midwest	Charles Bidwell
1098137.72	Southeast	Earlie Schleusner
886244.12	West	Georgianna Chisholm
1010690.60	Northeast	Tia Amato

```

30
31  /* Q2 - For the region with the largest (sum) of sales total_amt_usd,
32  how many total (count) orders were placed? */
33
34
35  SELECT *
36  FROM
37      (SELECT MAX(t2.count), t2.region_name
38       FROM
39           (SELECT sum(o.total_amt_usd) as total_amt_usd, r.name region_name, count(*) as count
40            from region r
41              join sales_reps sr
42                on r.id = sr.region_id
43              join accounts a
44                on a.sales_rep_id = sr.id
45              join orders o
46                on o.account_id = a.id
47             group by region_name) t2
48          GROUP BY t2.region_name ) t4
49  JOIN
50      (SELECT sum(o.total_amt_usd) as total_amt_usd, r.name region_name, count(*) as count
51       from region r
52         join sales_reps sr
53           on r.id = sr.region_id
54         join accounts a
55           on a.sales_rep_id = sr.id
56         join orders o
57           on o.account_id = a.id
58        group by region_name) t1
59

```

name

total_orders

Northeast

2357

```
62  /* Q3 - For the customer that spent the most (in total over their lifetime as
63  a customer) total_amt_usd, how many web_events did they have for each channel? */
64
65  SELECT we.channel, a.id account_id, COUNT(*)
66  FROM web_events we
67       JOIN accounts a
68       ON we.account_id = a.id
69       GROUP BY 1,2
70       HAVING a.id =
71          (SELECT t1.account_id
72           FROM
73             ((SELECT a.id account_id, sum(o.total_amt_usd) as total_sum_of_orders
74              FROM accounts a
75                   JOIN orders o
76                   ON a.id = o.account_id
77                   GROUP BY 1
78                   ORDER BY 2 DESC
79                   LIMIT 1))t1)
80       ORDER BY count DESC
81
```

channel	account_idd	count
direct	4211	44
organic	4211	13
adwords	4211	12
facebook	4211	11
twitter	4211	5
banner	4211	4

/ Q4 - What is the lifetime average amount spent in terms of total_amt_usd for the top 10 total spending accounts? */*

```
SELECT AVG(t1.tot_spent) as avg_lifetime_spent
FROM
  (SELECT a.name acc_name, sum(o.total_amt_usd) tot_spent
   FROM accounts a
   JOIN orders o
   ON a.id = o.account_id
   GROUP BY 1
   ORDER BY 2 DESC
   LIMIT 10) t1
```


avg_lifetime_spent

304846.969000000000