



Business Case Study



Q1) Fetch the full name and hiring date of all Employees who work as Sales Representatives.

SELECT

CONCAT(firstname, ' ', lastname) AS full_name,
hiredate

FROM Cochin_Traders.employees

WHERE title='Sales Representative';

Query results

JOB INFORMATION		RESULTS	JSON	EXECUTION D
Row	full_name ▼	hiredate ▼		
1	Michael Suyama	1993-10-17		
2	Robert King	1994-01-02		
3	Anne Dodsworth	1994-11-15		
4	Nancy Davolio	1992-05-01		
5	Janet Leverling	1992-04-01		
6	Margaret Peacock	1993-05-03		

Q2) Which of the products in our inventory need to be reordered?

SELECT

productid,
productname,
unitsinstock,
reorderlevel

FROM Cochin_Traders.products

WHERE unitsinstock<=reorderlevel

ORDER BY 2;



Business Case Study



Query results

[SAVE RESULTS](#)[EXI](#)

JOB INFORMATION		RESULTS	JSON	EXECUTION DETAILS	CHART	PREVIEW	EXECUTION GRAPH
Row	productid	productname	unitsinstock	reorderlevel			
1	17	Alice Mutton	0	0			
2	3	Aniseed Syrup	13	25			
3	2	Chang	17	25			
4	5	Chef Anton's Gumbo Mix	0	0			
5	48	Chocolate	15	25			
6	56	Gnocchi di nonna Alice	21	30			
7	31	Gorgonzola Telino	0	20			
8	37	Gravad lax	11	25			

Results per page: 50 1 – 22 of 22

Q3) Find and display the details of customers who have placed more than 5 orders.

SELECT

```
* FROM Cochin_Traders.customers
WHERE customerid IN
(
  SELECT customerid
    FROM Cochin_Traders.orders
  GROUP BY customerid
  HAVING COUNT(*)>5
);
```

Query results

[SAVE RESULTS](#)[EXPLORE DATA](#)

JOB INFORMATION		RESULTS	JSON	EXECUTION DETAILS	CHART	PREVIEW	EXECUTION GRAPH
Row	row_no	customerid	companyname	contactname	contacttitle		
1	4	AROUT	Around the Horn	Thomas Hardy	Sales Representative		
2	11	BSBEV	B's Beverages	Victoria Ashworth	Sales Representative		
3	19	EASTC	Eastern Connection	Ann Devon	Sales Agent		
4	72	SEVES	Seven Seas Imports	Hari Kumar	Sales Manager		
5	27	FRANS	Franchi S.p.A.	Paolo Accorti	Sales Representative		

Results per page: 50 1 – 50 of 63



Business Case Study



/* Q4) An employee of ours (Margaret Peacock, EmployeeID 4) has the record of completing most orders. However, there are some customers who've never placed an order with her. Show such customers.*/

```
SELECT
    customerid
FROM Cochin_Traders.customers
WHERE customerid NOT IN
(
    SELECT
        customerid
    FROM Cochin_Traders.orders
WHERE employeeid=4
);
```

```
SELECT
    DISTINCT c.customerid
FROM Cochin_Traders.customers c
LEFT JOIN Cochin_Traders.orders o
    ON c.customerid = o.customerid
    AND o.employeeid = 4
WHERE o.customerid IS NULL;
```

Query results

[SAVE RESULTS](#)

[EXPLORE D](#)

JOB INFORMATION		RESULTS	JSON	EXECUTION DETAILS	CHART	PREVIEW	EXECUTION GRAPH
Row	customerid						
1	CONSH						
2	NORTS						
3	SEVES						
4	FISSA						
5	DUMONI						

Results per page: 50 1 - 16 of 16

[PERSONAL HISTORY](#)

[PROJECT HISTORY](#)

[REI](#)



Business Case Study



/* Q5) The developers at Cochin Traders are testing an app that the customers will use to show orders. In order to make sure that even the largest orders will show up correctly on the app, they'd like some samples of orders that have lots of individual line items. Display the top 10 orders with the most line items. */

SELECT

 orderid,

 COUNT(*) AS No_of_line_items

FROM Cochin_Traders.orders

GROUP BY orderid

ORDER BY 2 DESC

LIMIT 10;

Query results

JOB INFORMATION		RESULTS	JSON	EXECUTION DETAILS
Row	orderid	No_of_line_items		
1	10741	1		
2	10793	1		
3	10864	1		
4	10768	1		
5	10383	1		
6	10355	1		
7	10558	1		
8	10743	1		
9	10707	1		
10	10453	1		



Business Case Study



Q6) Retrieve the top 5 best-selling products on the basis of the quantity ordered.

SELECT

```
p.productid,  
p.productname,  
SUM(d.quantity) AS total_quantity_ordered  
FROM Cochin_Traders.products p  
JOIN Cochin_Traders.orders_details d  
    USING(productid)
```

GROUP BY 1,2

ORDER BY 3 DESC

LIMIT 5;

Query results



JOB INFORMATION		RESULTS	JSON	EXECUTION DETAILS	CHART	PREVIEW
Row	productid	productname	total_quantity_ordered			
1	60	Camembert Pierrot	1577			
2	59	Raclette Courdavault	1496			
3	31	Gorgonzola Telino	1397			
4	56	Gnocchi di nonna Alice	1263			
5	16	Pavlova	1158			



Business Case Study



Q7) Analyze the monthly order count for the year 1997.

SELECT

EXTRACT(MONTH FROM orderdate) AS month,

COUNT(orderid) AS order_count

FROM Cochin_Traders.orders

WHERE EXTRACT(YEAR FROM orderdate) = 1997

GROUP BY 1

ORDER BY 2 DESC;

Query results

SAVE RESULTS

JOB INFORMATION

RESULTS

JSON

EXECUTION DETAILS

CHART

PREVIEW

EXECUTION GRAPH

Row	month	order_count
1	12	48
2	10	38
3	9	37
4	11	34
5	7	33
6	1	33
7	8	33
8	5	32
9	4	31
10	6	30

Results per page:

30

1 – 12 of 12



Business Case Study



Q8) Calculate the difference in sales revenue for each month compared to the previous month.

```
WITH present_revenue AS
(
    SELECT  FORMAT_DATE('%Y-%m',orderdate) AS year_monthwise,
            ROUND(SUM(d.unitprice*d.quantity),2) AS revenue
    FROM    Cochin_Traders.orders o
            JOIN Cochin_Traders.orders_details d
                USING(orderid)
    GROUP BY 1
),
previous_revenue AS
(
    SELECT
        year_monthwise,
        revenue,
        lag(revenue) OVER(ORDER BY year_monthwise) AS
previous_month_revenue
    FROM present_revenue
    ORDER BY 1
)
SELECT
    year_monthwise,
    revenue,
    previous_month_revenue,
    ROUND((revenue-previous_month_revenue),2) AS
difference_in_revenue
FROM previous_revenue
ORDER BY 1;
```



Business Case Study



Query results					SAVE RESULTS	EXPLORE D
JOB INFORMATION		RESULTS	JSON	EXECUTION DETAILS	CHART	PREVIEW
Row	year_monthwise	revenue	previous_month_revenue	difference_in_revenue		
1	1996-07	30192.1	null	null		
2	1996-08	26609.4	30192.1	-3582.7		
3	1996-09	27636.0	26609.4	1026.6		
4	1996-10	41203.6	27636.0	13567.6		
					Results per page:	50 1 - 23 of 23

Q9) Calculate the percentage of total sales revenue for each product.

SELECT

```
    productid,  
    productname,  
    ROUND((SUM(d.unitprice * d.quantity))/(SUM(SUM(d.unitprice *  
d.quantity)) OVER() ),2)*100 AS total_percent_sales  
FROM Cochin_Traders.products p  
    JOIN Cochin_Traders.orders_details d  
        USING(productid)  
GROUP BY 1,2  
ORDER BY 3 DESC;
```

Query results					SAVE RESULTS	EXPLORE D
JOB INFORMATION		RESULTS	JSON	EXECUTION DETAILS	CHART	PREVIEW
Row	productid	productname	total_percent_sales			
1	38	Côte de Blaye	11.0			
2	59	Raclette Courdavault	6.0			
3	29	Thüringer Rostbratwurst	6.0			
4	60	Camembert Pierrot	4.0			
5	62	Tarte au sucre	4.0			
6	17	Alice Mutton	3.0			
7	56	Gnocchi di nonna Alice	3.0			
8	51	Manjimup Dried Apples	3.0			
					Results per page:	50 1 - 50 of 77



Business Case Study



Q10) Determine the cumulative percentage of total sales revenue for each month.

WITH total_sales AS

```
(
  SELECT  FORMAT_DATE('%Y-%m',orderdate) AS year_monthwise,
          ROUND(SUM(d.unitprice*d.quantity),2) AS revenue
  FROM    Cochin_Traders.orders o
        JOIN Cochin_Traders.orders_details d
          USING(orderid)
  GROUP BY 1
)
SELECT
  year_monthwise,
  revenue,
  ROUND(SUM(revenue) OVER(ORDER BY year_monthwise)/SUM(revenue)
OVER(),2) * 100 AS cumulative_percentage
FROM total_sales
ORDER BY 1 DESC;
```

Query results

[SAVE RESULTS](#) [E](#)

JOB INFORMATION		RESULTS	JSON	EXECUTION DETAILS	CHART	PREVIEW	EXECUTION GRAPH
Row	year_monthwise_revenue ▼	revenue ▼	CumulativePercentage				
1	1998-05	19898.66	100.0000000000...				
2	1998-04	134630.56	98.53087719721...				
3	1998-03	109825.45	88.59107091638...				
4	1998-02	104561.95	80.48263180936...				
5	1998-01	100854.72	72.76279815981...				
6	1997-12	77476.26	65.31667018332...				

Results per page: 50 ▼ 1 – 23 of 23