

1. View for Gross Sales?

```
CREATE VIEW `gross_sales` AS
SELECT
    s.date, s.fiscal_year,
    s.customer_code, c.customer,
    c.market, s.product_code,
    p.product, p.variant,
    s.sold_quantity,
    g.gross_price as gross_price_per_item,
    round(s.sold_quantity*g.gross_price,2) as gross_price_total
from fact_sales_monthly s
join dim_product p
on
    s.product_code=p.product_code
join dim_customer c
on
    s.customer_code=c.customer_code
join fact_gross_price g
on
    g.fiscal_year=s.fiscal_year and
    g.product_code=s.product_code;
```

2. View for pre invoice discount deduction.

```
CREATE VIEW `sales_preinvoice_dis` AS
```

```
Select
```

```
    s.date, s.fiscal_year,
```

```

        s.customer_code, c.market,
        s.product_code,
        s.sold_quantity, g.gross_price,
        (s.sold_quantity*g.gross_price) as gross_price_total,
        pre.pre_invoice_discount_pct

from gdb0041.fact_sales_monthly s
JOIN dim_customer c
on
    c.customer_code = s.customer_code

JOIN fact_gross_price g
on
    s.product_code = g.product_code and
    s.fiscal_year = g.fiscal_year

join fact_pre_invoice_deductions pre
on
    s.customer_code = pre.customer_code and
    s.fiscal_year = pre.fiscal_year;

```

3. View for post invoice discount deduction.

```

CREATE VIEW `sales_post_invoice_dis` AS

select

```

```

        pr.date, pr.fiscal_year, pr.customer_code, pr.market,
        pr.product_code, p.product, p.variant, pr.sold_quantity,
        pr.gross_price,
        pr.gross_price_total, pr.pre_invoice_discount_pct,
        (1-pr.pre_invoice_discount_pct)*pr.gross_price_total as
        net_invoice_sale,
        (po.discounts_pct + po.other_deductions_pct) as
        total_discount
from sales_preinvoice_dis pr
join dim_product p
on
        pr.product_code = p.product_code
join fact_post_invoice_deductions po
on
        pr.date = po.date and
        pr.customer_code = po.customer_code and
        pr.product_code = po.product_code;

```

4. View for Net Sales.

SELECT

*,

```
        ( (1-total_discount)* net_invoice_sale) as net_sales  
FROM gdb0041.sales_post_invoice_dis;
```

5. Top 5 Market net sales.

```
SELECT  
  
        market,  
  
        round((sum(net_sales)/1000000),2) as net_sales_mln  
FROM gdb0041.net_sales  
where fiscal_year = 2021  
Group by market  
  
order by net_sales_mln desc  
limit 5 ;
```

6. Stored procedure that return top n market in given fiscal year.

```
CREATE PROCEDURE `top_n_market_by_net_sales_and_fiscal_year` (  
    in_fiscal_year int,  
    in_top_n int  
)  
BEGIN  
SELECT  
  
        market,  
  
        round((sum(net_sales)/1000000),2) as net_sales_mln
```

```
FROM gdb0041.net_sales
where fiscal_year = in_fiscal_year
Group by market

order by net_sales_mln desc
limit in_top_n ;
END
```

7. Stored procedure that return top n customer by given fiscal year and market.

```
CREATE PROCEDURE `get_top_n_customer_by_net_sales`(
    in_market varchar(45),
    in_fiscal_year int,
    in_top_n int
)
BEGIN
SELECT
    c.customer,
    round(sum(n.net_sales)/1000000,2) as net_sales_mln
FROM gdb0041.net_sales n
join dim_customer c
on
    n.customer_code = c.customer_code
```

where

fiscal_year = in_fiscal_year and

n.market = in_market

group by c.customer

order by net_sales_mln desc

limit in_top_n

;

END

8. Stored Procedure of Top n product by given fiscal year.

CREATE PROCEDURE `top_n_product_by_fiscal_year` (

in_fiscal_year int,

in_top_n int

)

BEGIN

SELECT

product,

round(sum(net_sales)/1000000,2) as net_sales_mln

FROM gdb0041.net_sales

where

fiscal_year = in_fiscal_year

group by product

```
order by net_sales_mln
```

```
limit in_top_n;
```

```
END
```

9. Query for the market share percentage of customer net sales in the fiscal year 2021.

```
With cte as (SELECT
```

```
        c.customer,
```

```
        round(sum(n.net_sales)/1000000,2) as net_sales_mln
```

```
FROM gdb0041.net_sales n
```

```
join dim_customer c
```

```
on
```

```
    n.customer_code = c.customer_code
```

```
where
```

```
    fiscal_year = 2021
```

```
group by c.customer
```

```
)
```

```
select
```

```
    *, net_sales_mln/sum(net_sales_mln) over() *100 as pct
```

```
from cte
```

```
order by net_sales_mln desc
```

10. Query for Breakdown of net sales percentages by customer in each region (APAC, NA, EU, LATAM).

```
with cte as (select
                c.customer,
                c.region,
                round(sum(net_sales)/1000000,2) as net_sales_mln
            from net_sales s
            join dim_customer c
            on
                s.customer_code = c.customer_code
            where fiscal_year = 2021
            group by c.customer , c.region)

select
    *,
    net_sales_mln*100/sum(net_sales_mln) over(partition by
        region) as pct_share_region
from cte
order by region , net_sales_mln desc
```


11. Stored procedure for retrieving the top N products by quantity sold per division.

```
CREATE PROCEDURE `get_top_n_product_per_division_by_qty_sold`  
(  
    in_fiscal_year int,  
    in_top_n int  
)  
BEGIN  
with cte as (select  
                p.division,  
                p.product,  
                sum(s.sold_quantity) as total_qty  
            from fact_sales_monthly s  
            join dim_product p  
                on s.product_code = p.product_code  
            where fiscal_year = in_fiscal_year  
            group by p.product,p.division),  
cte2 as (select  
            *,  
            dense_rank() over(partition by division order by  
total_qty desc) as drnk  
            from cte)
```

```
select * from cte2 where drnk <= in_top_n;
```

```
END
```

12. Retrieve the top 2 markets in every region by their gross sales amount in FY=2021.

```
with cte as (SELECT
```

```
    c.market,
```

```
    c.region,
```

```
    round(sum(s.gross_price_total)/1000000,2) as gross_sale_mln
```

```
FROM gdb0041.gross_sales s
```

```
join dim_customer c
```

```
    on s.customer_code = c.customer_code
```

```
where fiscal_year = 2021
```

```
group by c.market , c.region),
```

```
cte2 as
```

```
(select
```

```
    *, dense_rank() over(partition by region order by gross_sale_mln
```

```
desc) as rnk
```

```
from cte )
```

```
select * from cte2 where rnk <=2;
```