SQL Queries

AtliQ Hardware's Finance and Supply Chain Analytics Project

1. Croma India product wise sales report for fiscal year – 2021

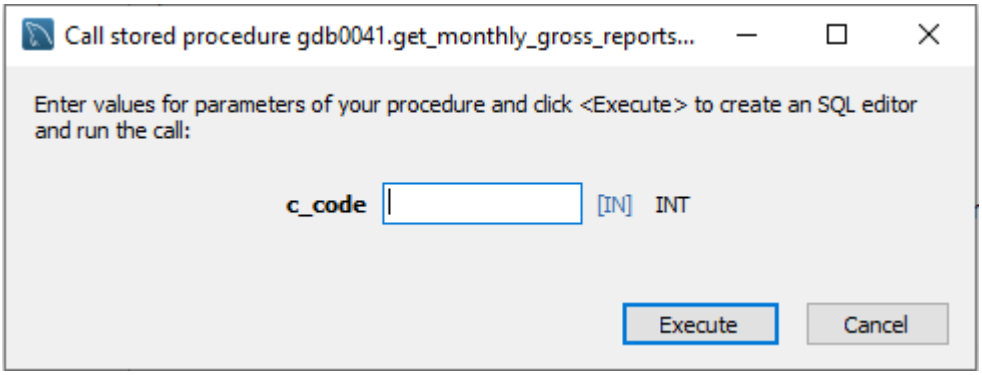
```
SELECT monthname(s.date) as month,
p.product,p.variant,s.sold_quantity,
round(g.gross_price,2) as gross_price,
round(s.sold_quantity * g.gross_price,2) as gross_price_total
FROM fact_sales_monthly s
join dim_product p
using (product_code)
join fact_gross_price g
on g.product_code = s.product_code and
g.fiscal_year = get_fiscal_year(s.date)
where
 customer_code = 90002002
 and get_fiscal_year(date) = 2021
order by date asc
limit 1000000;
```

2. Gross monthly total sales for Croma

```
SELECT monthname(s.date) as month,
round(sum(s.sold_quantity * g.gross_price),2) as gross_price_total
FROM fact_sales_monthly s
join fact_gross_price g
on g.product_code = s.product_code and g.fiscal_year = get_fiscal_year(s.date)
where
 customer_code = 90002002
group by s.date
order by date asc;
```

3. **Generate monthly gross sales report for any customer using stored procedure**

```
CREATE DEFINER=`root`@`localhost` PROCEDURE
`get_monthly_gross_reports_for_customer`(
 c_code INT
)
BEGIN
select
    s.date,
    sum(round(g.gross_price*sold_quantity,2)) as monthly_sales
from fact_sales_monthly s
join fact_gross_price g
on
    s.product_code=g.product_code and
    g.fiscal_year=get_fiscal_year(s.date)
where
    customer_code=c_code
group by s.date;
END
```



4. **Yearly gross sales report for Croma India**

```
select g.fiscal_year,
round(sum(s.sold_quantity * g.gross_price)/1000000,2) as "gross_price_total(in mln)"
from fact_sales_monthly s
join fact_gross_price g
on s.product_code = g.product_code
and get_fiscal_year(s.date) = g.fiscal_year
where customer_code = 90002002
group by g.fiscal_year;
```

5. **Top 5 Customers for a Financial Year 2021**

```
SELECT c.customer,
round(sum(net_sales)/1000000,2) as net_sales_mln
FROM gdb0041.net_sales s
join dim_customer c
using (customer_code)
where fiscal_year = 2021
group by customer
order by net_sales_mln desc
limit 5;
```

6. **Top 5 Market for a Financial Year 2021**

```
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;
```

7. Net sales % share by Customers

```sql
with cte as(
SELECT c.customer,
 round(sum(net_sales)/1000000,2) as net_sales_mln
 FROM gdb0041.net_sales s
 join dim_customer c
 using (customer_code)
 where s.fiscal_year = 2021
group by customer
 order by net_sales_mln desc
)
select *,
round(net_sales_mln*100/sum(net_sales_mln) over(),2) as net_sales_perc
from cte
order by net_sales_perc desc
limit 10;
```

8. Net sales % share by Region – APAC

```sql
with cte as(select customer,
sum(net_sales) as net_sales
from net_sales s
join dim_customer c
using (customer_code)
where s.fiscal_year = 2021 and region = "APAC"
group by customer
order by net_sales desc
)
select customer,round(net_sales*100/sum(net_sales) over(),2) as net_sales_perc
from cte
limit 10;
```

9. Top 3 products from each division by total quantity sold in a given year

```
with cte1 as
        (select
                    p.division,
                    p.product,
                    sum(sold_quantity) as total_qty
                from fact_sales_monthly s
                join dim_product p
                     on p.product_code=s.product_code
                where fiscal_year=2021
                group by p.product, p.division),
            cte2 as
             (select
                    *,
                    dense_rank() over (partition by division order by total_qty desc) as drnk
                from cte1)
    select * from cte2 where drnk<=3
```

10. Supply Chain – Forecast Quantity

```
with forecast_err_table as(
            select
                s.customer_code as customer_code,
                c.customer as customer_name,
                c.market as market,
                sum(s.sold_quantity) as total_sold_qty,
                sum(s.forecast_quantity) as total_forecast_qty,
                sum(s.forecast_quantity-s.sold_quantity) as net_error,
                round(sum(s.forecast_quantity-s.sold_quantity)*100/sum(s.forecast_quantity),1) as net_error_pct,
                sum(abs(s.forecast_quantity-s.sold_quantity)) as abs_error,
                round(sum(abs(s.forecast_quantity-sold_quantity))*100/sum(s.forecast_quantity),2) as abs_error_pct
            from fact_act_est s
            join dim_customer c
            on s.customer_code = c.customer_code
            where s.fiscal_year=2021
            group by customer_code
            )
    select
           *,
           if (abs_error_pct > 100, 0, 100.0 - abs_error_pct) as forecast_accuracy
    from forecast_err_table
        order by forecast_accuracy desc;
```