

SQL Queries

Atliq Hardwares Finance and Supply Chain Analytics Project

#1Q.create report than contains Month,product name,variant

#sold quantity,gross price per item,gross price total

```
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;
```

2Q.total gross price per date

```
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;
```

3Q.total gross price per FY

```
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;
```

#4Q Top cutomers by Net Sales

```
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;
```

#5Q Top markets by 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;
```

#6Q top 10 customers by net_sales_% contribution

```
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;

```

7Q. region wise net sales breakdown

```

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;

```

#8Q.Retrieve the top 2 markets in every region by their gross sales amount

#in FY=2021

```

with cte1 as(
SELECT c.region , c.market,
sum(g.gross_price_total) as gross_sales_total
FROM gdb0041.`gross sales` g

```

```

join dim_customer c
using (customer_code)
group by 1,2),
cte2 as(
select *, dense_rank() over(partition by region
order by gross_sales_total desc) as rnk
from cte1)
select * from cte2
where rnk <= 2;

```

#9Q. 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;

```