SQL Queries

[1] Croma India product-wise sales report for fiscal year 2021

```
SELECT
    sales.date,
    LEFT(DATE_FORMAT(sales.date, '%M'), 3) AS month,
    sales.product_code,
    p.product,
    p.variant,
    sales.sold_quantity,
    ROUND(gross.gross_price,2) AS gross_price,
    ROUND((sales.sold_quantity * gross.gross_price),2) AS
total_gross_price

FROM fact_sales_monthly AS sales
  JOIN dim_product AS p
  ON
    sales.product_code = p.product_code
  JOIN fact_gross_price AS gross
  ON
    sales.product_code = gross.product_code AND
    get_fiscal_year(sales.date) = gross.fiscal_year

WHERE
    customer_code = 90002002 AND
    get_fiscal_year(sales.date) = 2021
ORDER BY date
LIMIT 1000000;
```

Function:

```
CREATE DEFINER=`root`@`localhost` FUNCTION
`get_fiscal_year`(
     calendar_date DATE
) RETURNS int
    DETERMINISTIC
BEGIN
```

```
    DECLARE fiscal_year YEAR;
    SET fiscal_year = YEAR(DATE_ADD(calendar_date,
INTERVAL 4 MONTH));
RETURN fiscal_year;
END
```

[2] Gross monthly total sales report

```
SELECT
        CONCAT(LEFT(DATE_FORMAT(sales.date, '%M'),3),
',',YEAR(sales.date)) AS month,
        SUM(ROUND(sales.sold_quantity * gross.gross_price,2))
AS monthly_gross_sales

FROM fact_sales_monthly AS sales
JOIN fact_gross_price AS gross
  ON
   sales.product_code = gross.product_code AND
   get_fiscal_year(sales.date) = gross.fiscal_year

WHERE customer_code = 90002002
GROUP BY sales.date
ORDER BY date;
```

[3] Yearly gross sales report

```
SELECT
        get_fiscal_year(sales.date) AS fiscal_year,
        ROUND(SUM(sales.sold_quantity *
gross.gross_price/1000000),2) AS 'yearly_gross_sales (mln)'

FROM fact_sales_monthly AS sales
JOIN fact_gross_price AS gross
  ON
   sales.product_code = gross.product_code AND
   get_fiscal_year(sales.date) = gross.fiscal_year

WHERE customer_code = 90002002
GROUP BY get_fiscal_year(sales.date)
ORDER BY fiscal_year;
```

[4] Top markets, products and customers for a given fiscal year

Market:

```
CREATE DEFINER=`root`@`localhost` PROCEDURE
`get_top_N_markets_by_net_sales`(
    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
```

Products:

```
CREATE DEFINER=`root`@`localhost` PROCEDURE
`get_top_N_product_by_net_sales`(
        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 desc
    LIMIT in_top_N;
END
```

Customers:

```
CREATE DEFINER=`root`@`localhost` PROCEDURE
`get_top_N_customers_by_net_sales`(
          in_fiscal_year INT,
          in_top_N INT,
          in_market VARCHAR(40)
)
BEGIN
    SELECT
      customer,
      ROUND(SUM(net_sales/1000000),2) AS net_sales_mln
    FROM gdb0041.net_sales AS n
    JOIN dim_customer AS c
      ON c.customer_code = n.customer_code
    WHERE
        n.fiscal_year = in_fiscal_year AND
        n.market = in_market
    GROUP BY customer
    ORDER BY net_sales_mln desc
        LIMIT in_top_N;
END
```

[5] Net sales % share by Customers

```
with cte1 AS(
SELECT
              c.customer,
      ROUND(SUM(net_sales/1000000),2) AS net_sales_mln
FROM net_sales AS n
JOIN dim_customer AS c
  ON c.customer_code = n.customer_code
WHERE
        n.fiscal_year = 2021
GROUP BY c.customer)

SELECT
    *,
```

```
    ROUND(net_sales_mln*100/SUM(net_sales_mln) over(),2) AS
pct_net_sales
FROM cte1
ORDER BY net_sales_mln desc;
```

[6] Net sales % share by different Regions

```
with cte1 AS(
SELECT
                c.customer,
       c.region,
       ROUND(SUM(net_sales/1000000),2) AS net_sales_mln
FROM net_sales AS n
JOIN dim_customer AS c
  ON c.customer_code = n.customer_code
WHERE
         n.fiscal_year = 2021
GROUP BY c.customer, c.region)

SELECT
    *,
    ROUND(net_sales_mln*100/SUM(net_sales_mln) over(partition
by region),2) AS pct_net_sales
FROM cte1
ORDER BY region, net_sales_mln desc;
```

[7] Top 2 markets in every region by their gross sales for a given fiscal year

```
WITH cte1 AS
(SELECT
         g.market,
   c.region,
   ROUND(SUM(g.total_gross_price/1000000),2) AS
gross_sales_mln

FROM gross_sales AS g
JOIN dim_customer AS c
   ON g.customer_code = c.customer_code
WHERE g.fiscal_year = 2021
```

```
GROUP BY g.market, c.region),

cte2 AS
(SELECT *,
      dense_rank() over(partition by region order by
gross_sales_mln desc) AS drnk
FROM cte1)

SELECT * FROM cte2
WHERE drnk <= 2;
```

[8] Top 2 products per division by their sold quantity for a given fiscal year

```
WITH cte1 AS
(SELECT
    p.division,
    p.product,
    SUM(sold_quantity) AS total_quantity
FROM fact_sales_monthly AS s
JOIN dim_product AS p
  ON p.product_code = s.product_code
WHERE s.fiscal_year = 2021
GROUP BY p.product,p.division),

cte2 AS
(SELECT *,
          dense_rank() over(partition by division order by
total_quantity desc) AS drnk
FROM cte1)

SELECT * FROM cte2
WHERE drnk <= 3;
```