

TOP PRODUCTS

1. Find out 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
```

	division	product	total_sold_...	drnk	
▶	N & S	AQ Pen Drive DRC	2034569	1	
	N & S	AQ Digit SSD	1240149	2	
	N & S	AQ Clx1	1238683	3	
	P & A	AQ Gamers Ms	2477098	1	
	P & A	AQ Maxima Ms	2461991	2	
	P & A	AQ Master wireles...	2448784	3	
	PC	AQ Digit	135092	1	
	PC	AQ Gen Y	135031	2	
	PC	AQ Elite	134431	3	

2. Creating stored procedure for the above query

```
CREATE PROCEDURE `get_top_n_products_per_division_by_qty_sold` (
  in_fiscal_year INT,
  in_top_n INT
)
BEGIN
  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=in_fiscal_year
    group by p.product),
cte2 as (
    select
        *,
        dense_rank() over (partition by division order by total_qty desc) as
drnk
    from cte1)
select * from cte2 where drnk <= in_top_n;
END

```

```

1  CREATE DEFINER=`root`@`localhost` PROCEDURE `get_top_n_products_per_division_by_qty_sold` (
2      in_fiscal_year INT,
3      in_top_n INT
4  )
5  BEGIN
6      with cte1 as (
7          select
8              p.division,
9              p.product,
10             sum(sold_quantity) as total_qty
11         from fact_sales_monthly s
12         join dim_product p
13             on p.product_code=s.product_code
14         where fiscal_year=in_fiscal_year
15         group by p.product,p.division),
16         cte2 as (
17             select
18                 *,
19                 dense_rank() over (partition by division order by total_qty desc) as drnk
20             from cte1)
21         select * from cte2 where drnk <= in_top_n;
22     END

```