# 4. Top Markets, Customers, Products based on Net Sales

- Net pre invoice sales = Gross sales – Pre invoice deduction
- Net sales = Net pre invoice sales – Post invoice deduction

# Created view for pre invoice discount

```
CREATE
    ALGORITHM = UNDEFINED
    DEFINER = `root`@`localhost`
    SQL SECURITY DEFINER
VIEW `gdb0041`.`sales_preinv_discount` AS
    SELECT
        `s`.`date` AS `date`,
        `s`.`fiscal_year` AS `fiscal_year`,
        `s`.`customer_code` AS `customer_code`,
        `s`.`product_code` AS `product_code`,
        `p`.`product` AS `product`,
        `p`.`variant` AS `variant`,
        `c`.`market` AS `market`,
        `s`.`sold_quantity` AS `sold_quantity`,
        `g`.`gross_price` AS `gross_price`,
        (`g`.`gross_price` * `s`.`sold_quantity`) AS `total_gross_price`,
        `pre`.`pre_invoice_discount_pct` AS `pre_invoice_discount_pct`
    FROM
        ((((`gdb0041`.`fact_sales_monthly` `s`
        JOIN `gdb0041`.`dim_product` `p` ON ((`s`.`product_code` = `p`.`product_code`)))
        JOIN `gdb0041`.`fact_gross_price` `g` ON (((`s`.`product_code` = `g`.`product_code`)
            AND (`s`.`fiscal_year` = `g`.`fiscal_year`))))
        JOIN `gdb0041`.`fact_pre_invoice_deductions` `pre` ON (((`pre`.`customer_code` = `s`.`customer_code`)
            AND (`s`.`fiscal_year` = `pre`.`fiscal_year`))))
        JOIN `gdb0041`.`dim_customer` `c` ON ((`c`.`customer_code` = `s`.`customer_code`)))
```

```
4
5 •   SELECT * FROM gdb0041.sales_preinv_discount;
```

esult Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

| date | fiscal_year | customer_code | product_code | product | variant | market | sold_quantity | gross_pric | total_gross_pı | pre_invoice_disc |
|---|---|---|---|---|---|---|---|---|---|---|
| 2017-09-01 | 2018 | 70002017 | A0118150101 | AQ Dracul... | Standard | India | 51 | 15.3952 | 785.1552 | 0.0824 |
| 2017-09-01 | 2018 | 70002018 | A0118150101 | AQ Dracul... | Standard | India | 77 | 15.3952 | 1185.4304 | 0.2956 |
| 2017-09-01 | 2018 | 70003181 | A0118150101 | AQ Dracul... | Standard | Indonesia | 17 | 15.3952 | 261.7184 | 0.0536 |
| 2017-09-01 | 2018 | 70003182 | A0118150101 | AQ Dracul... | Standard | Indonesia | 6 | 15.3952 | 92.3712 | 0.2378 |
| 2017-09-01 | 2018 | 70006157 | A0118150101 | AQ Dracul... | Standard | Philiphines | 5 | 15.3952 | 76.9760 | 0.1057 |
| 2017-09-01 | 2018 | 70006158 | A0118150101 | AQ Dracul... | Standard | Philiphines | 7 | 15.3952 | 107.7664 | 0.1875 |
| 2017-09-01 | 2018 | 70007198 | A0118150101 | AQ Dracul... | Standard | South Korea | 29 | 15.3952 | 446.4608 | 0.0700 |
| 2017-09-01 | 2018 | 70007199 | A0118150101 | AQ Dracul... | Standard | South Korea | 34 | 15.3952 | 523.4368 | 0.2551 |
| 2017-09-01 | 2018 | 70008169 | A0118150101 | AQ Dracul... | Standard | Australia | 22 | 15.3952 | 338.6944 | 0.0953 |
| 2017-09-01 | 2018 | 70008170 | A0118150101 | AQ Dracul | Standard | Australia | 5 | 15.3952 | 76.9760 | 0.1896 |

# Created view for post invoice discount

```
12
13 •  SELECT * FROM gdb0041.post_invoice_discount;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

| date | fiscal_ye | product_code | customer_code | product | variant | market | sold_qua | gross_price | total_gross_price | pre_invoice_c | net_invoic | post_invoice_ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2017-09-01 | 2018 | A0118150101 | 70002017 | AQ Dracula... | Standard | India | 51 | 15.3952 | 785.1552 | 0.0824 | 720.46 | 0.3379 |
| 2017-09-01 | 2018 | A0118150101 | 70002018 | AQ Dracula... | Standard | India | 77 | 15.3952 | 1185.4304 | 0.2956 | 835.02 | 0.4013 |
| 2017-09-01 | 2018 | A0118150101 | 70003181 | AQ Dracula... | Standard | Indonesia | 17 | 15.3952 | 261.7184 | 0.0536 | 247.69 | 0.3752 |
| 2017-09-01 | 2018 | A0118150101 | 70003182 | AQ Dracula... | Standard | Indonesia | 6 | 15.3952 | 92.3712 | 0.2378 | 70.41 | 0.3446 |

```
CREATE
    ALGORITHM = UNDEFINED
    DEFINER = `root`@`localhost`
    SQL SECURITY DEFINER
VIEW `gdb0041`.`post_invoice_discount` AS
    SELECT
        `gdb0041`.`sales_preinv_discount`.`date` AS `date`,
        `gdb0041`.`sales_preinv_discount`.`fiscal_year` AS `fiscal_year`,
        `gdb0041`.`sales_preinv_discount`.`product_code` AS `product_code`,
        `gdb0041`.`sales_preinv_discount`.`customer_code` AS `customer_code`,
        `gdb0041`.`sales_preinv_discount`.`product` AS `product`,
        `gdb0041`.`sales_preinv_discount`.`variant` AS `variant`,
        `gdb0041`.`sales_preinv_discount`.`market` AS `market`,
        `gdb0041`.`sales_preinv_discount`.`sold_quantity` AS `sold_quantity`,
        `gdb0041`.`sales_preinv_discount`.`gross_price` AS `gross_price`,
        `gdb0041`.`sales_preinv_discount`.`total_gross_price` AS `total_gross_price`,
        `gdb0041`.`sales_preinv_discount`.`pre_invoice_discount_pct` AS `pre_invoice_discount_pct`,
        ROUND(((1 - `gdb0041`.`sales_preinv_discount`.`pre_invoice_discount_pct`) * `gdb0041`.`sales_preinv_discount`.`total_gross_price`),
                2) AS `net_invoice_sales`,
        (`po`.`discounts_pct` + `po`.`other_deductions_pct`) AS `post_invoice_dicount_pct`
    FROM
        (`gdb0041`.`sales_preinv_discount`
        JOIN `gdb0041`.`fact_post_invoice_deductions` `po` ON ((`po`.`customer_code` = `gdb0041`.`sales_preinv_discount`.`customer_code`)
            AND (`po`.`product_code` = `gdb0041`.`sales_preinv_discount`.`product_code`)
            AND (`po`.`date` = `gdb0041`.`sales_preinv_discount`.`date`))))
```

# Created view for net sales

```
SELECT * FROM gdb0041.net_sales;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

| date | fiscal_yea | product_coc | product | variant | customer_coc | market | sold_quan | gross_price | total_gross_price | pre_invoice_ | post_invoic | net_invoic | net_sales |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2017-09-01 | 2018 | A011815... | AQ Drac... | Standard | 70002017 | India | 51 | 15.3952 | 785.1552 | 0.0824 | 0.3379 | 720.46 | 477.016566 |
| 2017-09-01 | 2018 | A011815... | AQ Drac... | Standard | 70002018 | India | 77 | 15.3952 | 1185.4304 | 0.2956 | 0.4013 | 835.02 | 499.926474 |
| 2017-09-01 | 2018 | A011815... | AQ Drac... | Standard | 70003181 | Indonesia | 17 | 15.3952 | 261.7184 | 0.0536 | 0.3752 | 247.69 | 154.756712 |
| 2017-09-01 | 2018 | A011815... | AQ Drac... | Standard | 70003182 | Indonesia | 6 | 15.3952 | 92.3712 | 0.2378 | 0.3446 | 70.41 | 46.146714 |
| 2017-09-01 | 2018 | A011815... | AQ Drac... | Standard | 70006157 | Philippi... | 5 | 15.3952 | 76.9760 | 0.1057 | 0.3065 | 68.84 | 47.740540 |
| 2017-09-01 | 2018 | A011815... | AQ Drac... | Standard | 70006158 | Philippi... | 7 | 15.3952 | 107.7664 | 0.1875 | 0.3587 | 87.56 | 56.152228 |
| 2017-09-01 | 2018 | A011815... | AQ Drac... | Standard | 70007198 | South ... | 29 | 15.3952 | 446.4608 | 0.0700 | 0.3343 | 415.21 | 276.405297 |
| 2017-09-01 | 2018 | A011815... | AQ Drac... | Standard | 70007199 | South ... | 34 | 15.3952 | 523.4368 | 0.2551 | 0.4168 | 389.91 | 227.395512 |
| 2017-09-01 | 2018 | A011815... | AQ Drac... | Standard | 70008169 | Australia | 22 | 15.3952 | 338.6944 | 0.0953 | 0.3129 | 306.42 | 210.541182 |

```
CREATE
    ALGORITHM = UNDEFINED
    DEFINER = `root`@`localhost`
    SQL SECURITY DEFINER
VIEW `gdb0041`.`net_sales` AS
    SELECT
        `gdb0041`.`post_invoice_discount`.`date` AS `date`,
        `gdb0041`.`post_invoice_discount`.`fiscal_year` AS `fiscal_year`,
        `gdb0041`.`post_invoice_discount`.`product_code` AS `product_code`,
        `gdb0041`.`post_invoice_discount`.`product` AS `product`,
        `gdb0041`.`post_invoice_discount`.`variant` AS `variant`,
        `gdb0041`.`post_invoice_discount`.`customer_code` AS `customer_code`,
        `gdb0041`.`post_invoice_discount`.`market` AS `market`,
        `gdb0041`.`post_invoice_discount`.`sold_quantity` AS `sold_quantity`,
        `gdb0041`.`post_invoice_discount`.`gross_price` AS `gross_price`,
        `gdb0041`.`post_invoice_discount`.`total_gross_price` AS `total_gross_price`,
        `gdb0041`.`post_invoice_discount`.`pre_invoice_discount_pct` AS `pre_invoice_discount_pct`,
        `gdb0041`.`post_invoice_discount`.`post_invoice_dicount_pct` AS `post_invoice_dicount_pct`,
        `gdb0041`.`post_invoice_discount`.`net_invoice_sales` AS `net_invoice_sales`,
        ((1 - `gdb0041`.`post_invoice_discount`.`post_invoice_dicount_pct`) * `gdb0041`.`post_invoice_discount`.`net_invoice_sales`) AS `net_sales`
    FROM
        `gdb0041`.`post_invoice_discount`
```

# Top markets by net sales

```sql
CREATE DEFINER=`root`@`localhost` PROCEDURE `Top_n_markets_by_net_sales`(
in_top_n int,
in_fiscal_year int
)
BEGIN
select market,
round(sum(net_sales)/1000000,2) as net_sales_mln
from net_sales
where fiscal_year = in_fiscal_year
group by market
order by net_sales_mln
desc limit in_top_n;
END
```

```sql
call gdb0041.Top_n_markets_by_net_sales(5, 2021);
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content

| market | net_sales_mln |
|---|---|
| India | 210.67 |
| USA | 132.05 |
| South Korea | 64.01 |
| Canada | 45.89 |
| United Kingdom | 44.73 |

# Top customers by net sales

```sql
CREATE DEFINER=`root`@`localhost` PROCEDURE `Top_n_customers_by_net_sales`(
in_top_n int,
in_fiscal_year int,
in_market varchar(45))
BEGIN
select customer,
round(sum(net_sales)/1000000,2) as net_sales_mln
from net_sales n
join dim_customer c using (customer_code)
where fiscal_year = in_fiscal_year
and n.market = in_market
group by customer
order by net_sales_mln
desc limit in_top_n;

END
```

```sql
call gdb0041.Top_n_customers_by_net_sales(5, 2021, 'india');
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

| customer | net_sales_mln |
|---|---|
| Amazon | 30.00 |
| Atliq Exclusive | 23.98 |
| Flipkart | 12.96 |
| Electricalsocity | 12.31 |
| Propel | 11.86 |

# Top products by net sales

```sql
CREATE DEFINER=`root`@`localhost` PROCEDURE `Top_n_products_by_net_sales`(
in_top_n int,
in_fiscal_year int)
BEGIN
select product,
round(sum(net_sales)/1000000,2) as net_sales_mln
from net_sales
where fiscal_year = in_fiscal_year

group by product
order by net_sales_mln
desc limit in_top_n;

END
```

```sql
call gdb0041.Top_n_products_by_net_sales(5, 2021);
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

| product | net_sales_mln |
|---|---|
| AQ BZ Allin1 | 33.75 |
| AQ Qwerty | 27.84 |
| AQ Trigger | 26.95 |
| AQ Gen Y | 23.58 |
| AQ Maxima | 22.32 |