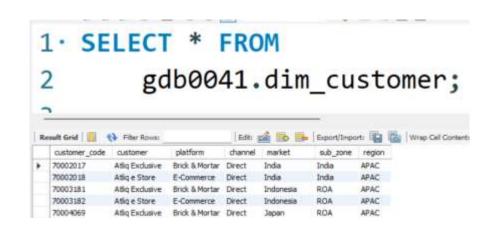
SQL PROJECT Sales analytics

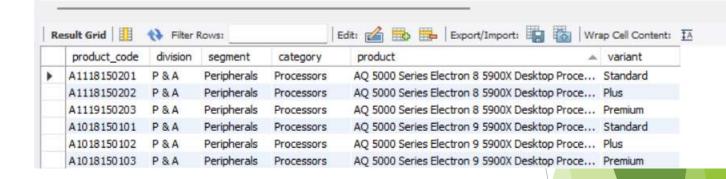
Objective

- To generate report of individual product sales (aggregated on monthly basis at product code level) for croma india customer for FY 2021 to track sales and further product analysis can be performed on it.
- Creating net sales report

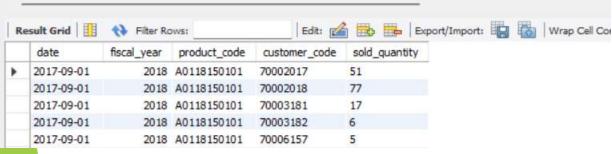
tables



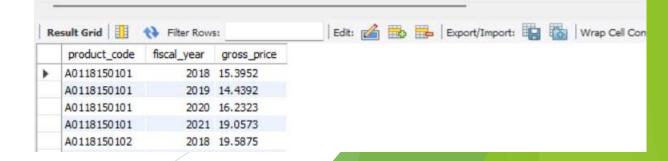
1 · SELECT * FROM gdb0041.dim_product;



- 1 · SELECT * FROM
- gdb0041.fact_sales_monthly;

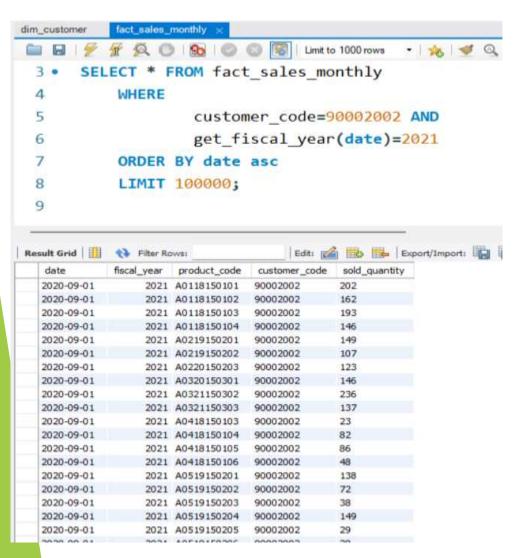


- 1 · SELECT * FROM
- 2 gdb0041.fact_gross_price;



Customer code for croma india

Creating function for date



Gross sales report -monthly product transactions

```
SELECT
                   s.date,
                   s.product code,
                   p.product,
                   p.variant,
                   s.sold_quantity,
                   g.gross_price,
                   ROUND(s.sold_quantity*g.gross_price,2) as gross_price_total
           FROM fact_sales_monthly s
 9
           JOIN dim product p
10
                   ON s.product_code=p.product_code
11
           JOIN fact gross price g
12
                   ON g.fiscal_year=get_fiscal_year(s.date)
13
               AND g.product_code=s.product_code
14
15
           WHERE
                   customer_code=90002002 AND
16
                   get_fiscal_year(s.date)=2021
17
18
           LIMIT 1000000;
```

	date	product_code	product	variant	sold_quantity	gross_price	gross_price_tota
١	2020-09-01	A0118150101	AQ Dracula HDD - 3.5 Inch SATA 6 Gb/s 5400 R	Standard	202	19.0573	3849.57
	2020-09-01	A0118150102	AQ Dracula HDD - 3.5 Inch SATA 6 Gb/s 5400 R	Plus	162	21.4565	3475.95
	2020-09-01	A0118150103	AQ Dracula HDD - 3.5 Inch SATA 6 Gb/s 5400 R	Premium	193	21.7795	4203.44
	2020-09-01	A0118150104	AQ Dracula HDD - 3.5 Inch SATA 6 Gb/s 5400 R	Premium Plus	146	22.9729	3354.04
	2020-09-01	A0219150201	AQ WereWolf NAS Internal Hard Drive HDD - 8	Standard	149	23.6987	3531.11
	2020-09-01	A0219150202	AQ WereWolf NAS Internal Hard Drive HDD - 8	Plus	107	24.7312	2646.24
	2020-09-01	A0220150203	AQ WereWolf NAS Internal Hard Drive HDD - 8	Premium	123	23.6154	2904.69
	2020-09-01	A0320150301	AQ Zion Saga	Standard	146	23.7223	3463.46
	2020-09-01	A0321150302	AQ Zion Saga	Plus	236	27.1027	6396.24
	2020-09-01	A0321150303	AQ Zion Saga	Premium	137	28.0059	3836.81
	2020-09-01	A0418150103	AQ Mforce Gen X	Standard 3	23	19.5235	449.04
	2020-09-01	A0418150104	AQ Mforce Gen X	Plus 1	82	19.9239	1633.76
	2020-09-01	A0418150105	AQ Mforce Gen X	Plus 2	86	20.0766	1726.59
	2020-09-01	A0418150106	AQ Mforce Gen X	Plus 3	48	19.9365	956.95
	2020-09-01	A0519150201	AQ Mforce Gen Y	Standard 1	138	22.3984	3090.98
	2020-09-01	A0519150202	AQ Mforce Gen Y	Standard 2	72	24.9298	1794.95
	2020-09-01	A0519150203	AQ Mforce Gen Y	Standard 3	38	26.5871	1010.31
	2020-09-01	A0519150204	AQ Mforce Gen Y	Plus 1	149	26.1081	3890.11
	2020-09-01	A0519150205	ΔΩ Mfnrce Gen Y	Plus 7	79	29 7008	861 32

Gross monthly total sales for croma

```
Export: Wrap Cell Content: IA
Result Grid
              Filter Rows:
              monthly_sales
  2017-09-01
             122407.57
  2017-10-01
              162687.56
  2018-01-01 127574.73
             144799.54
  2018-04-01
             130643.92
  2018-05-01
             139165.06
  2018-06-01
             125735.36
             125409.90
  2018-08-01
  2018-09-01 343337.14
  2018-12-01 653944.72
```

Include pre-invoice deductions for all customers

SELECT

```
s.date,
      s.product_code,
      p.product,
  p.variant,
      s.sold quantity,
      g.gross_price as gross_price_per_item,
      ROUND(s.sold_quantity*g.gross_price,2) as gross_price
      pre.pre_invoice_discount_pct
FROM fact_sales_monthly s
JOIN dim product p
       ON s.product_code=p.product_code
JOIN fact_gross_price g
       ON g.fiscal_year=get_fiscal_year(s.date)
       AND g.product code=s.product code
JOIN fact_pre_invoice_deductions as pre
       ON pre.customer_code = s.customer_code AND
       pre.fiscal_year=get_fiscal_year(s.date)
WHERE
       get_fiscal_year(s.date)=2021
```

	date	product_code	product	variant	sold_quantity	gross_price_per_item	gross_price_total	pre_invoice_disco
Ī	2020-09-01	A0118150101	AQ Dracula HDO - 3.5 Inch SATA 6 Gb/s 5400 R	Standard	248	19.0573	4726.21	0.0703
,	2020-09-01	A0118150101	AQ Dracula HDD - 3.5 Inch SATA 6 Gb/s 5400 R	Standard	240	19.0573	4573.75	0.2061
	2020-09-01	A0118150101	AQ Dracula HDD - 3.5 Inch SATA 6 Gb/s 5400 R	Standard	31	19.0573	590.78	0.0974
	2020-09-01	A0118150101	AQ Dracula HDO - 3.5 Inch SATA 6 Gb/s 5400 R	Standard	37	19.0573	705.12	0.2065
	2020-09-01	A0118150101	AQ Dracula HDD - 3.5 Inch SATA 6 Gb/s 5400 R	Standard	7	19.0573	133.40	0.1068
	2020-09-01	A0118150101	AQ Dracula HDD - 3.5 Inch SATA 6 Gb/s 5400 R	Standard	12	19.0573	228.69	0.2612
	2020-09-01	A0118150101	AQ Dracula HDD - 3.5 Inch SATA 6 Gb/s 5400 R	Standard	17	19.0573	323.97	0.2471
	2020-09-01	A0118150101	AQ Dracula HDO - 3.5 Inch SATA 6 Gb/s 5400 R	Standard	60	19.0573	1143.44	0.0858
	2020-09-01	A0118150101	AQ Dracula HDD - 3.5 Inch SATA 6 Gb/s 5400 R	Standard	34	19.0573	647.95	0.2450
	2020-09-01	A0118150101	AQ Dracula HDO - 3.5 Inch SATA 6 Gb/s 5400 R	Standard	24	19.0573	457.38	0.0736
	2020-09-01	A0118150101	AQ Dracula HDD - 3.5 Inch SATA 6 Gb/s 5400 R	Standard	88	19.0573	1677.04	0.2105
	2020-09-01	A0118150101	AQ Dracula HDO - 3.5 Inch SATA 6 Gb/s 5400 R	Standard	49	19.0573	933,81	0.0793
	2020-09-01	A0118150101	AQ Dracula HDD - 3.5 Inch SATA 6 Gb/s 5400 R	Standard	60	19.0573	1143.44	0.1817
	10,20,000	A0119150101	40 Practile HDD _ 2 5 Tech SATA 6 Chile 5400 0	Ctandard	7	10 0573	122 41	0.0061

Added the fiscal year in the fact_sales_monthly table itself



2020-09-01

2020-09-01

2020-09-01

2020-09-01

2020-09-01

2020-09-01

2020-09-01

70002017

70002018

70003181

70003182

70004069

70004070

70005163

A0118150101

A0118150101

A0118150101

A0118150101

A0118150101

A0118150101

A0118150101

variant

AQ Dracula HDD - 3.5 Inch SATA 6 Gb/s 5400 R... Standard

AQ Dracula HDD - 3.5 Inch SATA 6 Gb/s 5400 R... Standard

AQ Dracula HDD - 3.5 Inch SATA 6 Gb/s 5400 R... Standard

AQ Dracula HDD - 3.5 Inch SATA 6 Gb/s 5400 R... Standard

AQ Dracula HDD - 3.5 Inch SATA 6 Gb/s 5400 R... Standard 31

AQ Dracula HDD - 3.5 Inch SATA 6 Gb/s 5400 R... Standard 12

AO Dracula HDD - 3.5 Inch SATA 6 Gb/s 5400 R... Standard 17

sold_quantity

gross_price_per_item

19.0573

19.0573

19.0573

19.0573

19.0573

19.0573

19.0573

```
SELECT
                   s.date,
                   s.customer_code,
                   s.product code,
                   p.product, p.variant,
                   s.sold quantity,
                   g.gross price as gross price per item,
                   ROUND(s.sold_quantity*g.gross_price,2) as gross_price_total,
                   pre.pre invoice discount pct
10
           FROM fact sales monthly s
           JOIN dim product p
11
12
                   ON s.product_code=p.product_code
13
           JOIN fact gross price g
                   ON g.fiscal_year=s.fiscal_year
14
15
                   AND g.product_code=s.product_code
           JOIN fact_pre_invoice_deductions as pre
16
                   ON pre.customer_code = s.customer_code AND
17
18
                   pre.fiscal year=s.fiscal year
19
           WHERE
                   s.fiscal year=2021
20
```

gross_price_total

4726.21

4573.75

590.78

705.12

133,40

228.69

323.97

pre_invoice_discour

0.0703

0.2061

0.0974

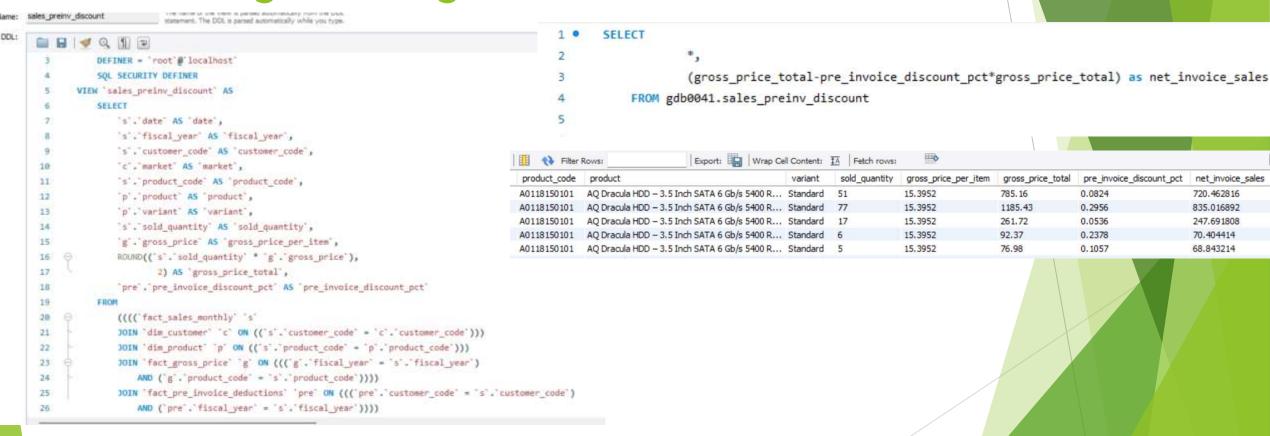
0.2065

0.1068

0.2612

0.2471

Creating the view `sales_preinv_discount` and store all the data in like a virtual table and then generating net_invoive_sales



Database Views: Post Invoice Discount, Net Sales

```
The name of the view is parsed automatically from the OOL
ALGORITHM - UNDEFINED
           DEFINER = 'root' # localhost'
           SOL SECURITY DEFINER
       VIEW 'net_sales' AS
                'sales postiny discount'. date A5 date',
                'sales postiny discount', fiscal year' A5 'fiscal year',
                "sales postiny discount", customer code" A5 "customer code",
                'sales postiny discount', market' A5 market',
                'sales postiny_discount'.'product_code' A5 'product_code',
11
                "sales postiny discount", product AS "product",
13
                'sales postiny discount', variant' AS 'variant',
                "sales postiny discount", sold quentity A5 "sold quentity",
15
                'sales postiny discount', gross price total' A5 'gross price total',
16
                'sales postiny discount', pre invoice discount pct' AS 'pre invoice discount pct',
17
                'sales postiny discount', net invoice sales' A5 'net invoice sales',
                'sales postinu discount', post invoice discount pct' A5 'post invoice discount pct',
18
               ("sales postiny discount", net invoice sales" * (1 - "sales postiny discount", post invoice discount pct")) AS "net s
19
20
21
                sales postiny discount
```

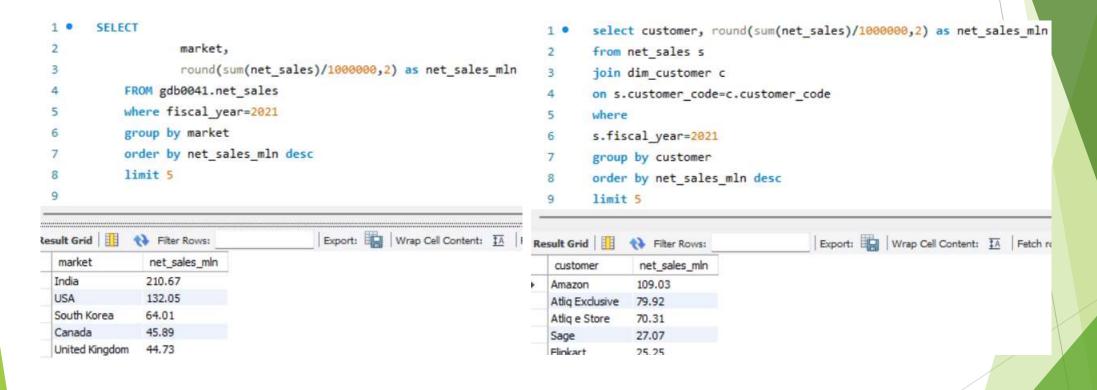
```
VIEW 'sales preinv discount' AS
    SELECT
        's'.'date' AS 'date'.
        's'.'fiscal year' AS 'fiscal year',
        's'.'customer_code' AS 'customer_code',
        'c'. 'market' AS 'market',
        's'.' product code' AS 'product code',
        'p'. 'product' AS 'product',
        'p'.'variant' AS 'variant',
        's'.'sold quantity' AS 'sold quantity',
        'g'. gross price AS 'gross price per item',
        ROUND(('s'.'sold quantity' * 'g'.'gross price'),
                2) AS 'gross price total',
        'pre'.'pre invoice discount pct' AS 'pre invoice discount pct'
    FROM
        (((( fact sales monthly 's'
        JOIN 'dim customer' 'c' ON (('s'.'customer code' = 'c'.'customer code')))
        JOIN 'dim product' 'p' ON (('s'.'product code' = 'p'.'product code')))
        JOIN 'fact gross price' 'g' ON ((('g'.'fiscal year' = 's'.'fiscal year')
            AND ('g'.'product code' = 's'.'product code'))))
        JOIN `fact pre invoice deductions` `pre` ON (((`pre`.`customer code` = `s`.`cus
            AND ('pre'.'fiscal year' = 's'.'fiscal year'))))
```

Net sales report

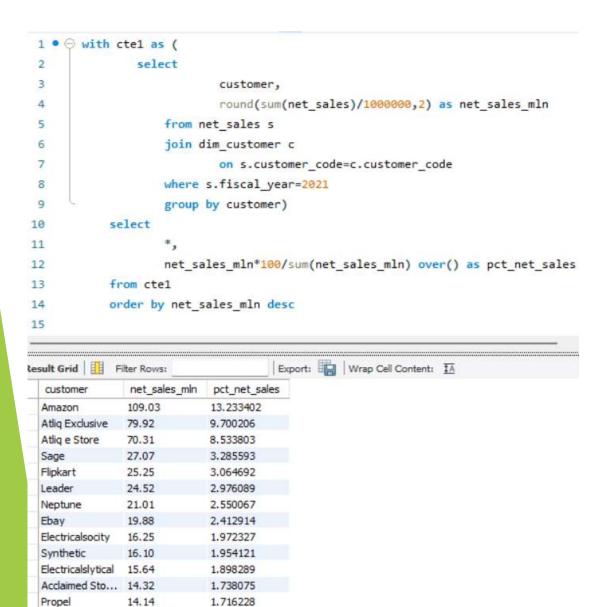
1 • SELECT * FROM gdb0041.net_sales;

product	variant	sold_quantity	gross_price_total	pre_invoice_discount_pct	net_invoice_sales	post_invoice_discount_pct	net_sales
Q Dracula HDD - 3.5 Inch SATA 6 Gb/s 5400 R	Standard	4	61.58	0.2803	44.319126	0.3905	27.0125072970
Q Dracula HDD - 3.5 Inch SATA 6 Gb/s 5400 R	Standard	16	246.32	0.2803	177.276504	0.4139	103.901758994
Q Dracula HDD - 3.5 Inch SATA 6 Gb/s 5400 R	Standard	4	61.58	0.2803	44.319126	0.3295	29.7159739830
Q Dracula HDD - 3.5 Inch SATA 6 Gb/s 5400 R	Standard	6	92.37	0.2803	66.478689	0.3244	44.9130022884
Q Dracula HDD - 3.5 Inch SATA 6 Gb/s 5400 R	Standard	9	138.56	0.2803	99.721632	0.3766	62.1664653888
Q Dracula HDD - 3.5 Inch SATA 6 Gb/s 5400 R	Standard	6	92.37	0.2803	66.478689	0.3615	42,4466429265
Q Dracula HDD - 3.5 Inch SATA 6 Gb/s 5400 R	Standard	7	107.77	0.2803	77.562069	0.3173	52.9516245063
Q Dracula HDD - 3.5 Inch SATA 6 Gb/s 5400 R	Standard	10	153.95	0.2803	110.797815	0.3501	72.0074999685
Q Dracula HDD - 3.5 Inch SATA 6 Gb/s 5400 R	Standard	6	92.37	0.2803	66,478689	0.3740	41.6156593140
Q Dracula HDD - 3.5 Inch SATA 6 Gb/s 5400 R	Standard	4	61.58	0.2117	48.543514	0.2863	34.6455059418
Q Dracula HDD - 3.5 Inch SATA 6 Gb/s 5400 R	Standard	2	30.79	0.2117	24.271757	0.2851	17.3518790793
Q Dracula HDD - 3.5 Inch SATA 6 Gb/s 5400 R	Standard	3	46.19	0.2117	36.411577	0.2882	25.9177605086
Q Dracula HDD - 3.5 Inch SATA 6 Gb/s 5400 R	Standard	5	76.98	0.2117	60.683334	0.3334	40.4515104444
Q Dracula HDD - 3.5 Inch SATA 6 Gb/s 5400 R	Standard	1	15.40	0.2117	12.139820	0.3296	8.1385353280
Q Dracula HDD - 3.5 Inch SATA 6 Gb/s 5400 R	Standard	1	15.40	0.2117	12.139820	0.2901	8.6180582180
Q Dracula HDD - 3.5 Inch SATA 6 Gb/s 5400 R	Standard	5	76.98	0.2117	60.683334	0.3233	41.0644121178
Q Dracula HDD - 3.5 Inch SATA 6 Gb/s 5400 R	Standard	1	15.40	0.2117	12.139820	0.3095	8.3825457100
Q Dracula HDD - 3.5 Inch SATA 6 Gb/s 5400 R	Standard	1	15.40	0.2117	12.139820	0.3209	8.2441517620

Get top 5 market and customers by net sales in fiscal year 2021



customer wise net sales percentage contribution



Thank you.