

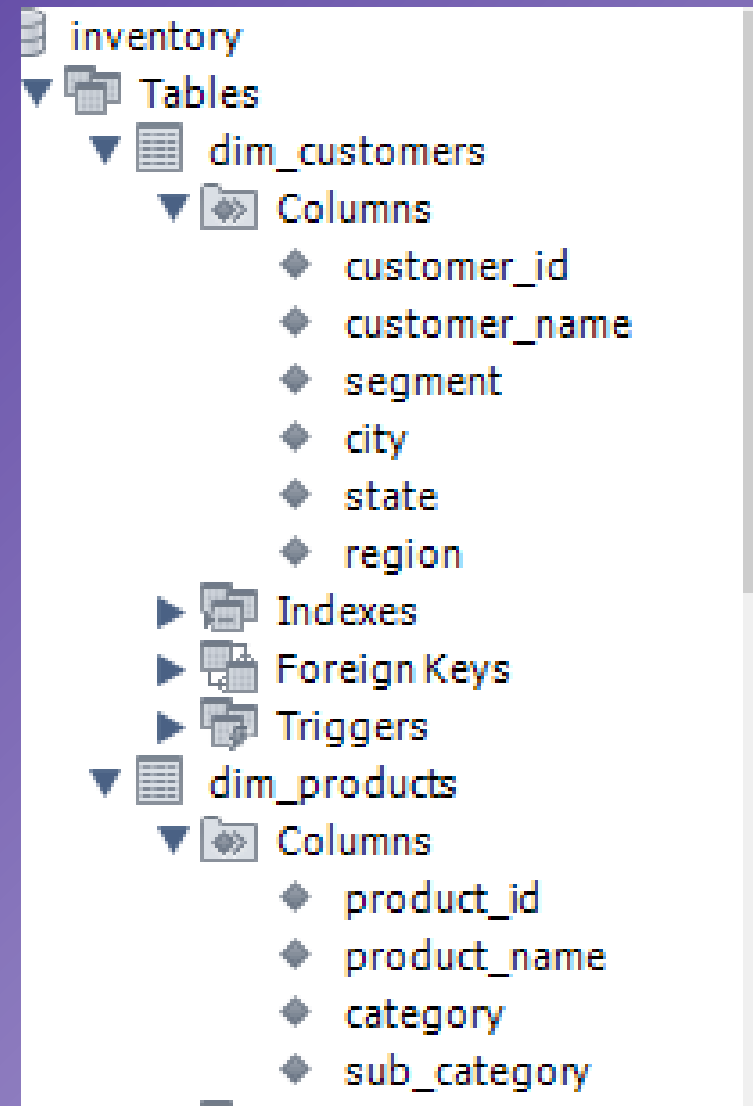
SQL INVENTORY ANALYSIS PROJECT

for Sample Superstore

by KUMKUM

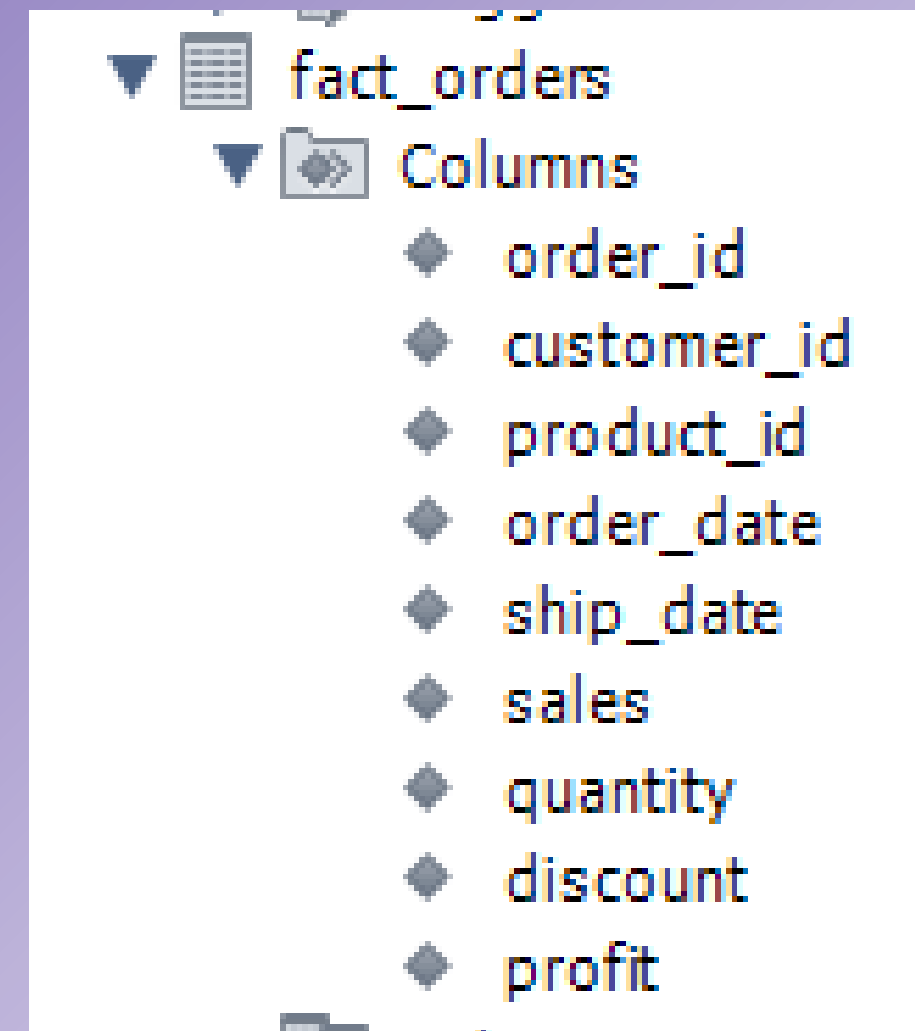


SCHEMAS



inventory

- Tables
 - dim_customers
 - Columns
 - customer_id
 - customer_name
 - segment
 - city
 - state
 - region
 - Indexes
 - Foreign Keys
 - Triggers
 - dim_products
 - Columns
 - product_id
 - product_name
 - category
 - sub_category



fact_orders

- Columns
 - order_id
 - customer_id
 - product_id
 - order_date
 - ship_date
 - sales
 - quantity
 - discount
 - profit

```
SELECT p.product_name, ROUND(SUM(o.sales), 2) AS total_revenue
FROM fact_orders o
JOIN dim_products p ON o.product_id = p.product_id
GROUP BY p.product_name
ORDER BY total_revenue DESC
LIMIT 10;
```

RESULT

product_name	total_revenue
Canon imageCLASS 2200 Advanced Copier	61599.83
Fellowes PB500 Electric Punch Plastic Comb Bind...	27453.38
Cisco TelePresence System EX90 Videoconferen...	22638.48
HON 5400 Series Task Chairs for Big and Tall	21870.57
GBC DocuBind TL300 Electric Binding System	19823.48
GBC Ibimaster 500 Manual ProClick Binding System	19024.50
Hewlett Packard LaserJet 3310 Copier	18839.68
HP Designjet T520 Inkjet Large Format Printer -...	18374.90
GBC DocuBind P400 Electric Binding System	17965.07
High Speed Automatic Electric Letter Opener	17030.31

3

```
SELECT c.region, ROUND(SUM(o.profit), 2) AS total_profit
FROM fact_orders o
JOIN dim_customers c ON o.customer_id = c.customer_id
GROUP BY c.region
ORDER BY total_profit DESC;
```

region	total_profit
West	97994.30
East	94402.26
Central	63538.67
South	30079.36

```
SELECT p.category, ROUND(SUM(o.sales), 2) AS total_sales
FROM fact_orders o
JOIN dim_products p ON o.product_id = p.product_id
WHERE p.category IN ('Furniture', 'Office Supplies', 'Technology')
GROUP BY p.category
ORDER BY total_sales ASC;
```

category	total_sales
Office Supplies	702867.25
Furniture	732479.31
Technology	835505.84

```

SELECT
    p.category,
    ROUND(AVG(o.discount) * 100, 2) AS avg_discount_percentage
FROM
    fact_orders o
JOIN
    dim_products p ON o.product_id = p.product_id
WHERE
    p.category IN ('Furniture', 'Office Supplies', 'Technology')
GROUP BY
    p.category
ORDER BY
    avg_discount_percentage DESC;

```

category	avg_discount_percentage
Furniture	17.44
Office Supplies	15.56
Technology	13.22

```
SELECT DATE_FORMAT(order_date, '%Y-%m') AS month, ROUND(SUM(sales), 2) AS total_sales
FROM fact_orders
GROUP BY month
ORDER BY month;
```

month	total_sales
2014-01	14236.90
2014-02	4519.92
2014-03	55691.04
2014-04	28013.98
2014-05	23648.28
2014-06	34595.14
2014-07	33946.37
2014-08	27909.47
2014-09	81777.34
2014-10	31453.37
2014-11	78628.74
2014-12	69545.64
2015-01	18174.08
2015-02	11951.40
2015-03	38726.26
2015-04	34195.25

3

```
SELECT c.segment, ROUND(SUM(o.sales), 2) AS segment_sales
FROM fact_orders o
JOIN dim_customers c ON o.customer_id = c.customer_id
GROUP BY c.segment
ORDER BY segment_sales DESC;
```

segment	segment_sales
Consumer	1161012.62
Corporate	705602.06
Home Office	428895.10


```

SELECT p.product_name, ROUND(SUM(o.sales), 2) AS total_sales, ROUND(SUM(o.profit), 2)
FROM fact_orders o
JOIN dim_products p ON o.product_id = p.product_id
GROUP BY p.product_name
HAVING total_sales > 1000 AND total_profit < 100
ORDER BY total_sales DESC;

```

product_name	total_sales	total_profit
Cisco TelePresence System EX90 Videoconferen...	22638.48	-1811.08
HON 5400 Series Task Chairs for Big and Tall	21870.57	0.00
GBC DocuBind P400 Electric Binding System	17965.07	-1878.17
High Speed Automatic Electric Letter Opener	17030.31	-262.00
Lexmark MX611dhe Monochrome Laser Printer	16829.90	-4589.97
Martin Yale Chadless Opener Electric Letter Ope...	16656.21	-1299.19
Riverside Palais Royal Lawyers Bookcase, Royal...	15610.97	-669.53
Bretford Rectangular Conference Table Tops	12995.28	-327.25

```
SELECT c.customer_name, ROUND(SUM(o.sales), 2) AS lifetime_value
FROM fact_orders o
JOIN dim_customers c ON o.customer_id = c.customer_id
GROUP BY c.customer_name
ORDER BY lifetime_value DESC
LIMIT 5;
```

customer_name	lifetime_value
Sean Miller	25043.07
Tamara Chand	19052.22
Raymond Buch	15117.35
Tom Ashbrook	14595.62
Adrian Barton	14473.57

```
SELECT ROUND(AVG(DATEDIFF(ship_date, order_date)), 2) AS avg_shipping_days  
FROM fact_orders;
```

avg_shipping_days
3.96

```
SELECT
  YEAR(order_date) AS sales_year,
  ROUND(SUM(sales), 2) AS total_sales
FROM fact_orders
GROUP BY sales_year
ORDER BY sales_year;
```

sales_year	total_sales
2014	483966.19
2015	470442.40
2016	608532.72
2017	732568.47