# REPORTING ASSIGNMENT

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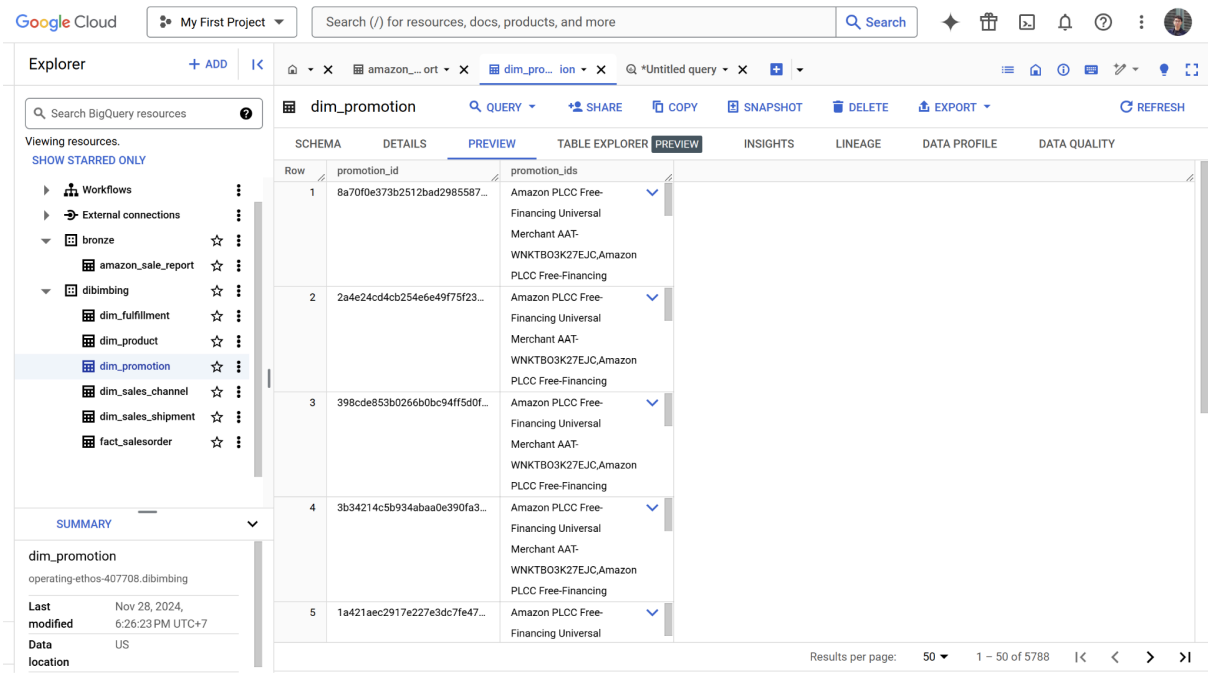
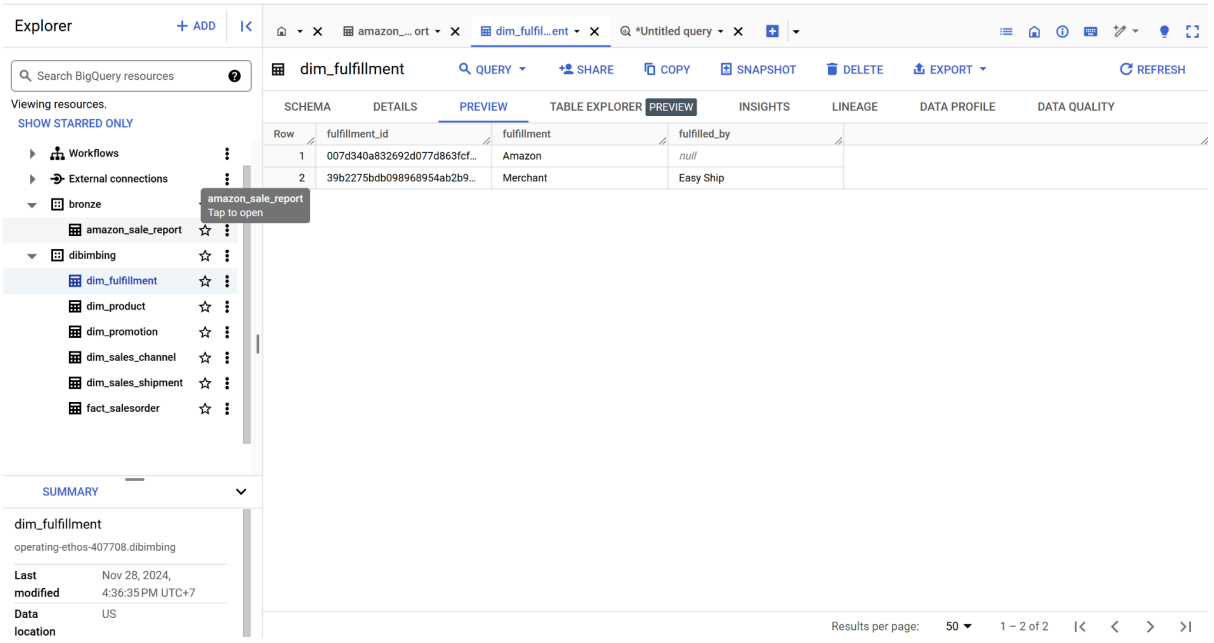
Link Github : https://github.com/ivanmnlw/hands-on_data-modelling

1. Build table promotion



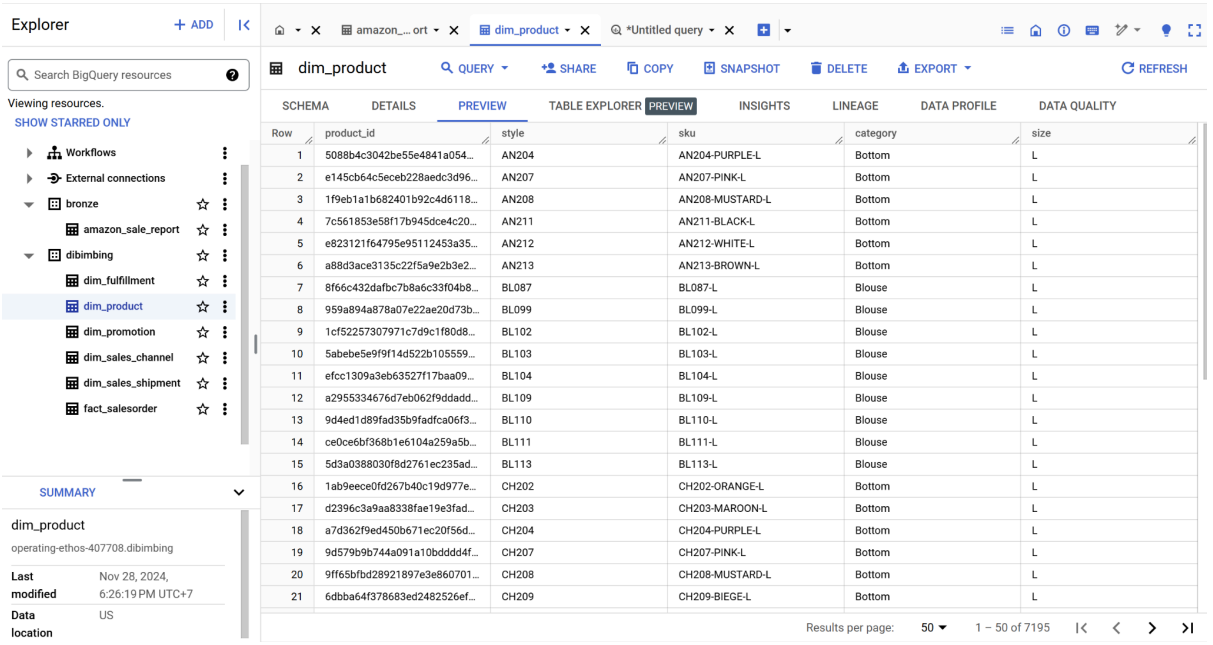

```
-- dim_promotion
{{
  config(
    materialized='table'
  )
}}

With t_data AS (
SELECT DISTINCT
  `promotion-ids` AS promotion_ids
FROM
    {{ source('bronze', 'amazon_sale_report') }}
)

SELECT {{ dbt_utils.generate_surrogate_key([
        'promotion_ids'
      ]) }} as promotion_id, *
FROM t_data
```

2. Build Table Fulfillment



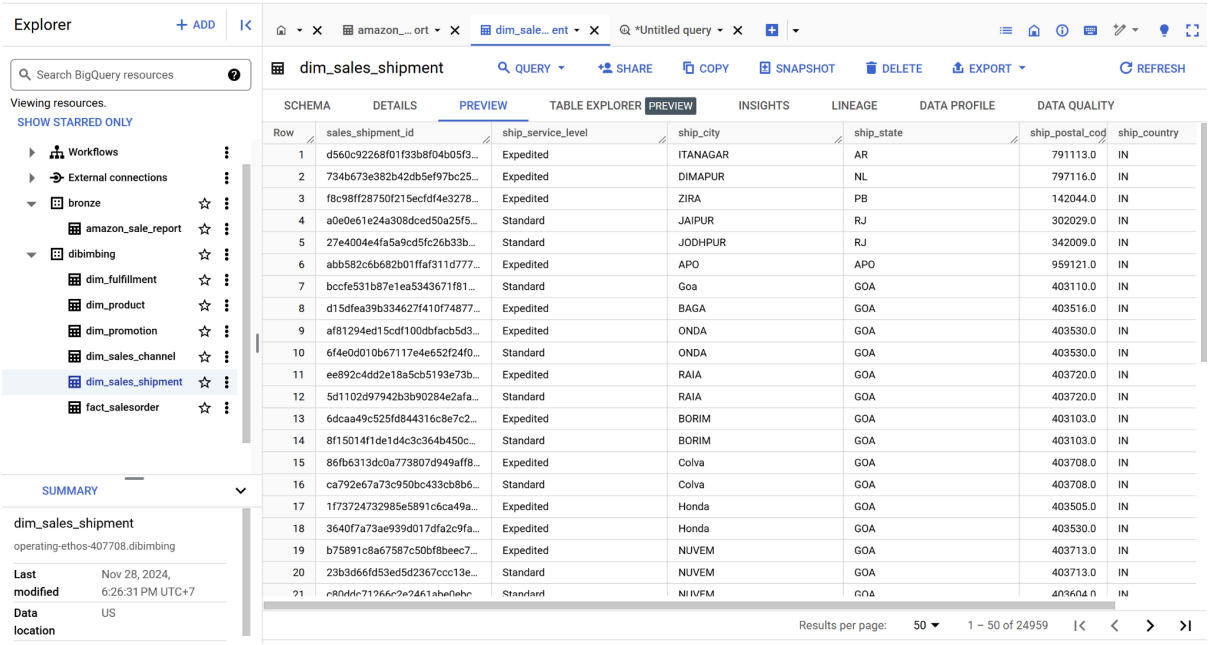

```
-- dim_fulfillment
{{
  config(
    materialized='table'
  )
}}

With t_data AS (
SELECT DISTINCT
  Fulfilment AS fulfillment,
  `fulfilled-by` AS fulfilled_by
FROM
    {{ source('bronze', 'amazon_sale_report') }}
)

SELECT
{{ dbt_utils.generate_surrogate_key([
        'fulfillment',
        'fulfilled_by'
      ])}} AS fulfillment_id, *
FROM t_data
```

3. Build Table Product



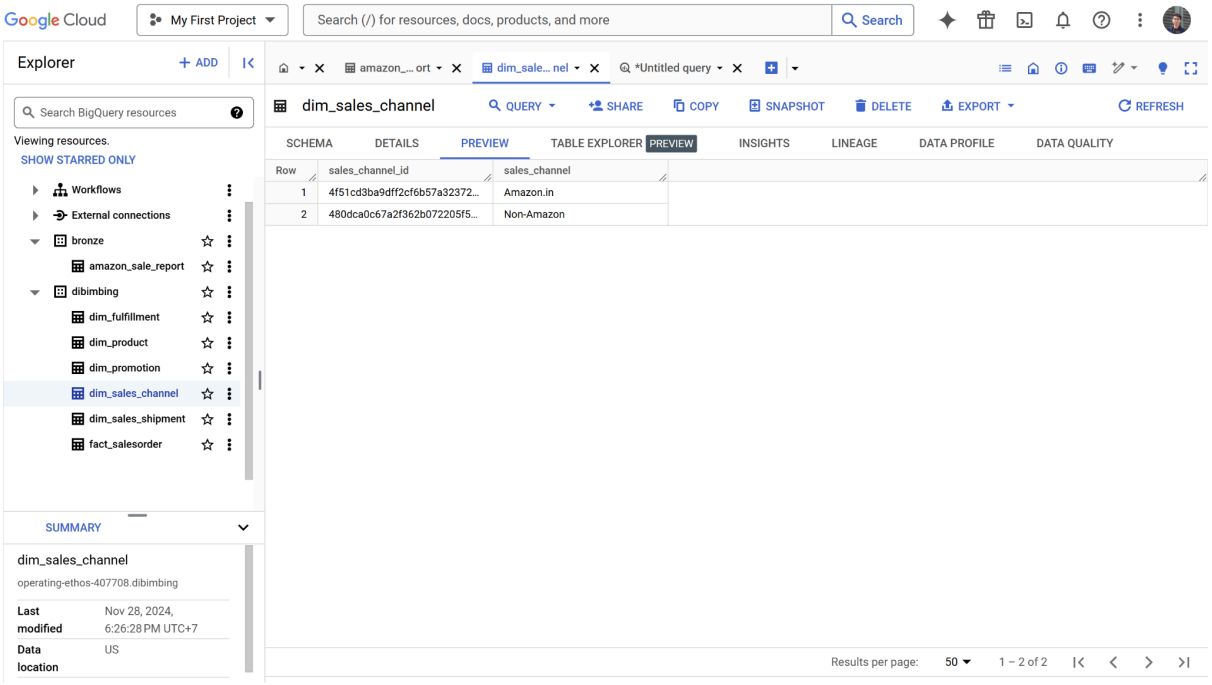

```
-- dim_product
{{
  config(
    materialized='table'
  )
}}

With t_data AS (
SELECT DISTINCT
  Style AS style,
  SKU AS sku,
  Category AS category,
  Size AS size,
FROM
    {{ source('bronze', 'amazon_sale_report') }}
)

SELECT {{ dbt_utils.generate_surrogate_key([
        'sku'
      ]) }} as product_id, *
FROM t_data
```

4. Build Table Sales Shipment



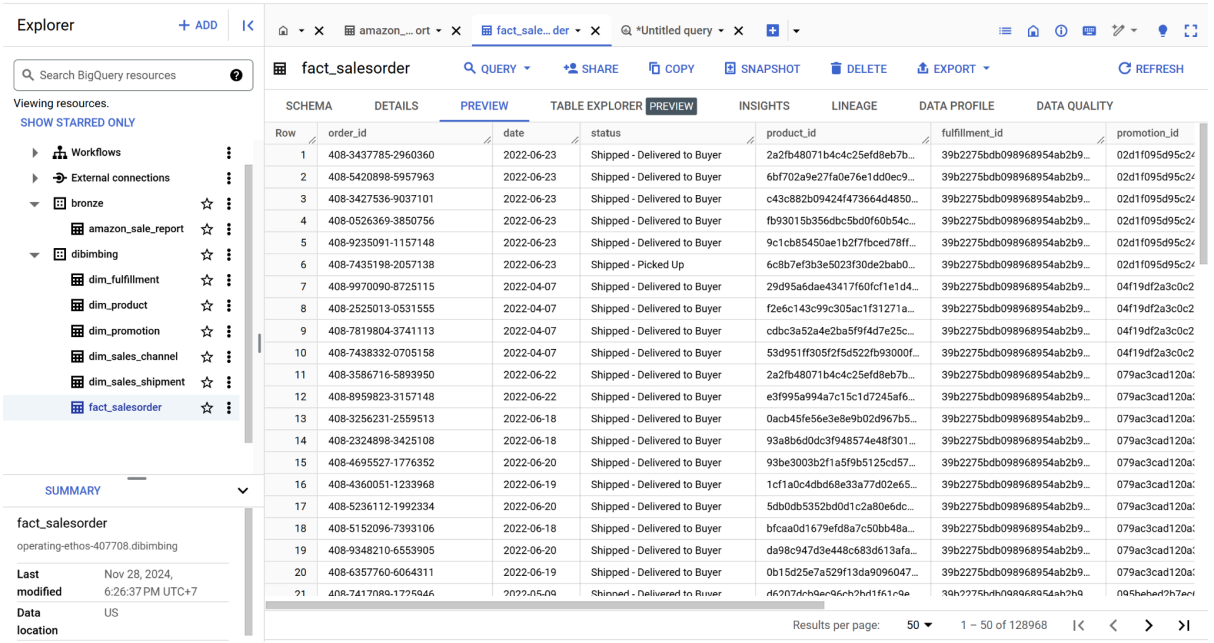

```sql
-- dim_sales_shipment
{{
  config(
    materialized='table'
  )
}}

With t_data AS (
SELECT DISTINCT
  `ship-service-level` AS ship_service_level,
  `ship-city` AS ship_city,
  `ship-state` AS ship_state,
  `ship-postal-code` AS ship_postal_code,
  `ship-country` AS ship_country
FROM
    {{ source('bronze', 'amazon_sale_report') }}
WHERE `ship-city` IS NOT NULL
)

SELECT {{ dbt_utils.generate_surrogate_key([
                'ship_service_level',
                'ship_city',
                'ship_state',
                'ship_postal_code',
                'ship_country'
            ]) }} as sales_shipment_id, *
FROM t_data
```

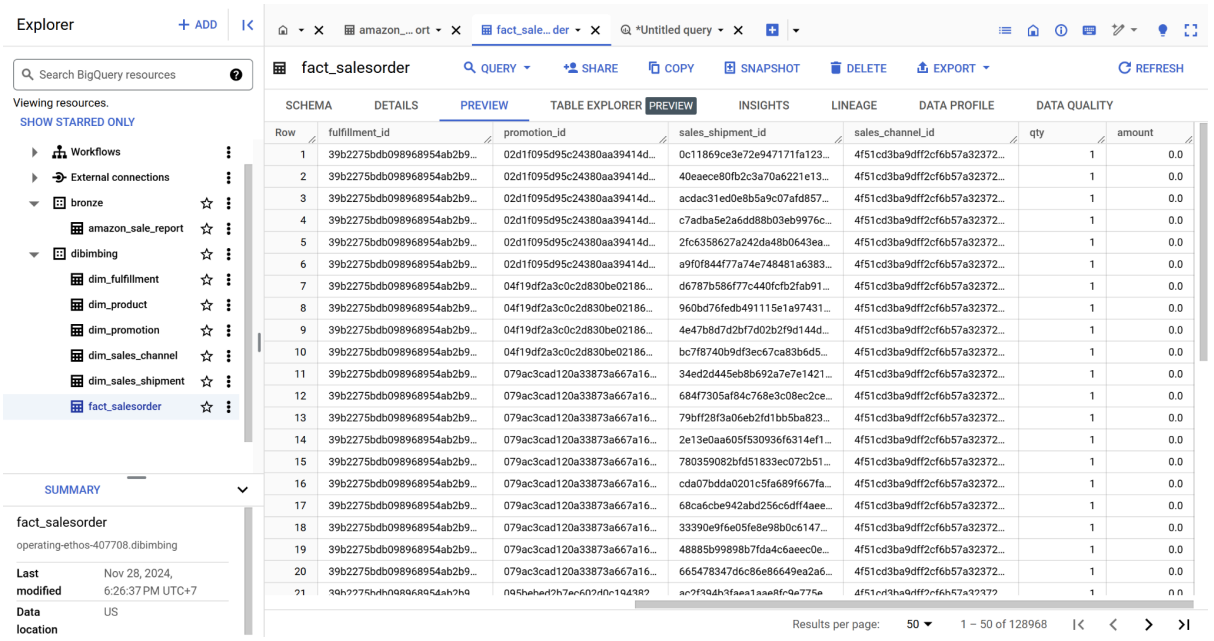
5. Build Table Sales Channel




```
-- dim_sales_channel
{{
  config(
    materialized='table'
  )
}}

With t_data AS (
SELECT DISTINCT
  `Sales Channel ` AS sales_channel
FROM
    {{ source('bronze', 'amazon_sale_report') }}
)

SELECT {{ dbt_utils.generate_surrogate_key([
                'sales_channel'
            ]) }} as sales_channel_id, *
FROM t_data
```

6. Build Table Fact Sales Order

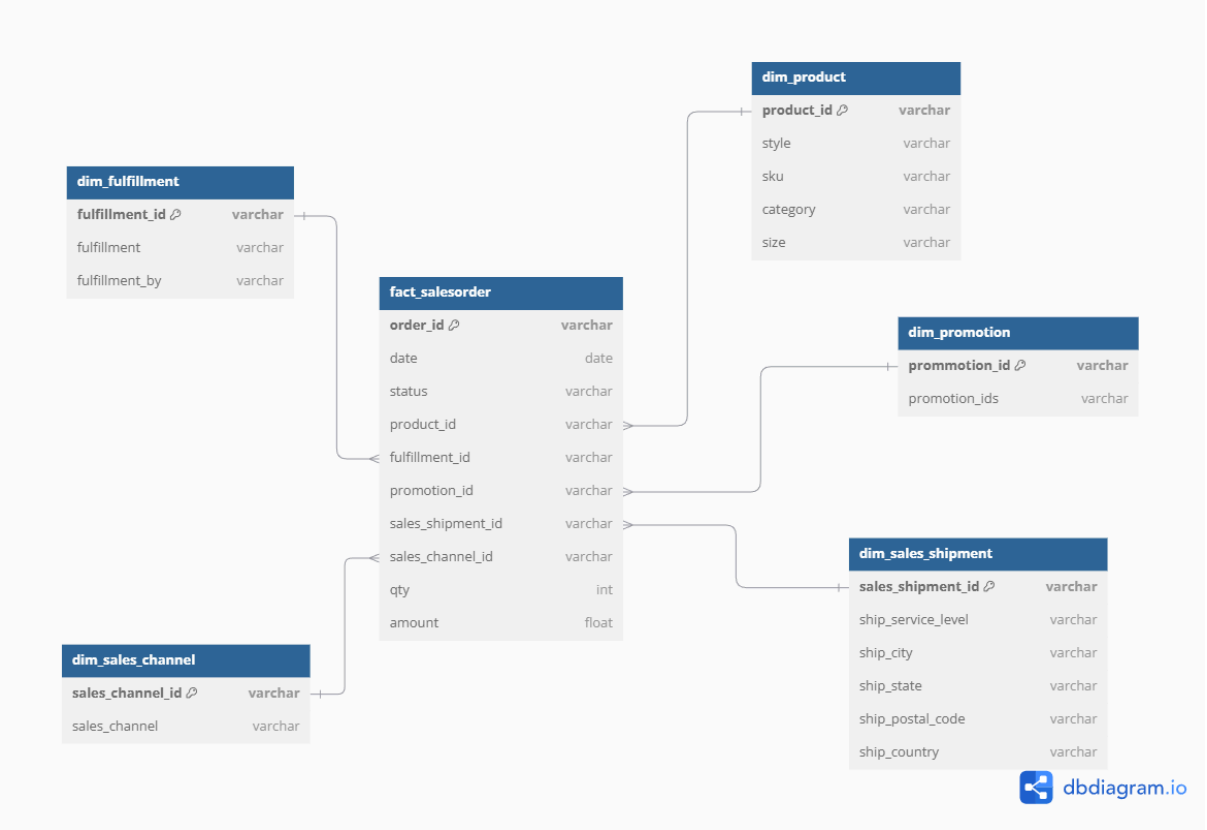



```
-- fact_salesorder
{{
  config(
    materialized='table'
  )
}}

SELECT
  `Order ID` AS order_id,
  Date AS date,
  Status AS status,
  {{ dbt_utils.generate_surrogate_key([
```

```
        'SKU'
      ]) }} as product_id,
  {{ dbt_utils.generate_surrogate_key([
        'Fulfilment',
        ``fulfilled-by``
      ])}} AS fulfillment_id,
  {{ dbt_utils.generate_surrogate_key([
        ``promotion-ids``
      ]) }} as promotion_id,
  {{ dbt_utils.generate_surrogate_key([
        ``ship-service-level``,
        ``ship-city``,
        ``ship-state``,
        ``ship-postal-code``,
        ``ship-country``
      ]) }} as sales_shipment_id,
  {{ dbt_utils.generate_surrogate_key([
        ``Sales Channel ``
      ]) }} as sales_channel_id,

  SUM(qty) AS qty,
  COALESCE(SUM(amount),0) AS amount,
FROM
    {{ source('bronze', 'amazon_sale_report') }}

GROUP BY ALL
```

7. Create ERD for Star Schema




```
// Use DBML to define your database structure
// Docs: https://dbml.dbdiagram.io/docs

Table fact_salesorder {
  order_id varchar [primary key]
  date date
  status varchar
  product_id varchar
  fulfillment_id varchar
  promotion_id varchar
  sales_shipment_id varchar
  sales_channel_id varchar
  qty int
  amount float
}

Table dim_fulfillment {
  fulfillment_id varchar [primary key]
  fulfillment varchar
  fulfillment_by varchar
}
```

```
Table dim_product {
  product_id varchar [primary key]
  style varchar
  sku varchar
  category varchar
  size varchar
}

Table dim_promotion {
  prommotion_id varchar [primary key]
  promotion_ids varchar
}

Table dim_sales_channel {
  sales_channel_id varchar [primary key]
  sales_channel varchar
}

Table dim_sales_shipment {
  sales_shipment_id varchar [primary key]
  ship_service_level varchar
  ship_city varchar
  ship_state varchar
  ship_postal_code varchar
  ship_country varchar
}

Ref: fact_salesorder.product_id > dim_product.product_id
Ref: fact_salesorder.fulfillment_id > dim_fulfillment.fulfillment_id
Ref: fact_salesorder.promotion_id > dim_promotion.prommotion_id
Ref: fact_salesorder.sales_shipment_id >
dim_sales_shipment.sales_shipment_id
Ref: fact_salesorder.sales_channel_id > dim_sales_channel.sales_channel_id
```

8. Analysis using Star Schema (Top Selling Product)