

The background is a dark, textured grey. It is decorated with various space-themed illustrations in shades of pink, red, and yellow. In the top left, there's a smiling planet with large eyes. Next to it are three yellow stars connected by lines. In the top center is a pink ringed planet. To its right are two vertical pink bars. Further right is a planet with a yellow ring and a smiling face. In the top right corner is another smiling planet. On the left side, there's a pink cloud-like shape. In the bottom left corner is a red rocket ship. At the bottom center is a pink planet with a ring and a smiling face. Next to it is an atomic symbol with a red nucleus and yellow electrons. To the right of the atom is a pink book with a white page. In the bottom right corner is a smiling sun with a face. On the far right edge, there is a vertical pink thermometer with a red liquid level.

# SQL PROJECT PRESENTATION

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# QUESTION 1

Selama transaksi yang terjadi di tahun 2021, pada bulan apa total nilai transaksi (*after\_discount*) paling besar? Gunakan *is\_valid = 1* untuk memfilter data transaksi.

Source table = *order\_detail*

## ANSWER

months_2021	total_2021
8	227862744
12	217309963
10	207603259.9
11	180396009.73999998
7	148007735

Nilai transaksi (*after\_discount*) terbesar ada pada bulan ke-8 yaitu bulan Agustus.

## QUERY

```
SELECT
    EXTRACT(MONTH FROM order_date) months_2021,
    SUM(after_discount) total_2021
FROM order_detail
WHERE EXTRACT(YEAR FROM order_date) = 2021 AND is_valid = 1
GROUP BY months_2021
ORDER BY total_2021 DESC
```



# QUESTION 2

Selama transaksi pada tahun 2022, kategori apa yang menghasilkan nilai transaksi paling besar? Gunakan is\_valid = 1 untuk memfilter data transaksi.

Source table: *order\_detail*, *sku\_detail*

## ANSWER

total_2022	category
918451576	Mobiles & Tablets
365344148.9	Entertainment
316358100	Appliances
214028543.4	Computing
135588253	Men Fashion

Kategori yang menghasilkan nilai transaksi yang paling besar adalah kategori Mobiles & Tables.

## QUERY

```
SELECT SUM(after_discount) total_2022, category
FROM (
    SELECT sku_detail.category, order_detail.*, sku_detail.sku_name
    FROM order_detail
    INNER JOIN sku_detail ON order_detail.sku_id = sku_detail.id
    WHERE EXTRACT(YEAR FROM order_date) = 2022 AND is_valid = 1
) AS join_data
GROUP BY 2
ORDER BY total_2022 DESC
```



## QUESTION 3

Bandingkan nilai transaksi dari masing-masing kategori pada tahun 2021 dengan tahun 2022. Sebutkan kategori apa saja yang mengalami peningkatan dan kategori apa yang mengalami penurunan nilai transaksi dari tahun 2021 ke 2022. Gunakan *is\_valid = 1* untuk memfilter data transaksi.

Source table: *order\_detail*, *sku\_detail*

### QUERY

```
CREATE TABLE table_2021 AS
SELECT
    SUM(order_detail.after_discount),
    sku_detail.category
FROM order_detail
INNER JOIN sku_detail ON order_detail.sku_id = sku_detail.id
WHERE is_valid = 1 AND EXTRACT(YEAR FROM order_date) = 2021
GROUP BY sku_detail.category

CREATE TABLE table_2022 AS
SELECT
    SUM(order_detail.after_discount),
    sku_detail.category
FROM order_detail
INNER JOIN sku_detail ON order_detail.sku_id = sku_detail.id
WHERE is_valid = 1 AND EXTRACT(YEAR FROM order_date) = 2022
GROUP BY sku_detail.category

SELECT table_2021.category,
    table_2021.sum AS total_2021,
    table_2022.sum AS total_2022,
    table_2022.sum - table_2021.sum AS difference
FROM table_2021
LEFT JOIN table_2022 ON table_2021.category = table_2022.category
GROUP BY table_2021.category, table_2021.sum, table_2022.sum
ORDER BY table_2022.sum - table_2021.sum DESC
```



## QUESTION 3

Bandingkan nilai transaksi dari masing-masing kategori pada tahun 2021 dengan tahun 2022. Sebutkan kategori apa saja yang mengalami peningkatan dan kategori apa yang mengalami penurunan nilai transaksi dari tahun 2021 ke 2022. Gunakan *is\_valid = 1* untuk memfilter data transaksi.

Source table: *order\_detail*, *sku\_detail*

## ANSWER

category	total_2021	total_2022	difference
Mobiles & Tablets	370606718	918451576	547844858
Entertainment	162326357.4	365344148.9	203017791.49999997
Appliances	218550177	316358100	97807923
Men Fashion	58628198	135588253	76960055
Computing	172878860	214028543.4	41149683.400000006
Soghaat	15056202.6	17658332	2602129.4000000004
Kids & Baby	23971057.8	25931276.84	1960219.0399999999
Beauty & Groo...	46047360	46211019.18	163659.17999999997
Books	10124596	6792519.2	-3332076.8
Others	40468515.74	21744646.02	-18723869.720000003

Dari 15 kategori yang ada, terdapat 13 kategori yang mengalami peningkatan dengan mobiles & tablets yang mengalami peningkatan terbesar. Kategori yang mengalami penurunan adalah kategori books dan others.



# QUESTION 4

Tampilkan top 5 metode pembayaran yang paling populer digunakan selama 2022 (berdasarkan total unique order). Gunakan is\_vaild = 1 untuk memfilter data transaksi.

Source table: *order\_detail*, *payment\_method*

## QUERY



```
SELECT COUNT(DISTINCT order_detail.id) AS total_id,  
       payment_detail.payment_method  
FROM order_detail  
INNER JOIN payment_detail ON order_detail.payment_id = payment_detail.id  
WHERE EXTRACT(YEAR FROM order_detail.order_date) = 2022  
      AND order_detail.is_valid = 1  
GROUP BY payment_detail.payment_method  
ORDER BY 1 DESC  
LIMIT 5
```

## ANSWER



total_id	payment_method
1809	cod
181	Payaxis
75	customercredit
69	Easypay
26	jazzwallet

Berikut adalah top 5 metode pembayaran yang paling populer selama 2022. Metode pembayaran teratas adalah COD.



# QUESTION 5

Urutkan dari ke-5 produk ini berdasarkan nilai transaksinya.

- 1.Samsung
- 2.Apple
- 3.Sony
- 4.Huawei
- 5.Lenovo

Gunakan is\_vaild = 1 untuk memfilter data transaksi.

Soruce table: order\_detail, sku\_detail

## QUERY

```
CREATE TABLE table5 AS
SELECT order_detail.qty_ordered,
       order_detail.after_discount,
       sku_detail.sku_name
FROM order_detail
LEFT JOIN sku_detail ON order_detail.sku_id = sku_detail.id
WHERE is_valid = 1
```

```
SELECT
  devicetype,
  SUM(after_discount) AS total_rev
FROM (
  SELECT
    CASE
      WHEN LOWER(sku_name) LIKE '%apple%'
      OR LOWER(sku_name) LIKE '%iphone%'
      OR LOWER(sku_name) LIKE '%macbook%'
      OR LOWER(sku_name) LIKE '%mac%'
      OR LOWER(sku_name) LIKE '%ipad%' THEN 'Apple'
      WHEN LOWER(sku_name) LIKE '%samsung%'
      OR LOWER(sku_name) LIKE '%galaxy%' THEN 'Samsung'
      WHEN LOWER(sku_name) LIKE '%lenovo%' THEN 'Lenovo'
      WHEN LOWER(sku_name) LIKE '%sony%' THEN 'Sony'
      WHEN LOWER(sku_name) LIKE '%huawei%' THEN 'Huawei'
      ELSE 'Other'
    END AS devicetype, after_discount
  FROM table5
) AS result_table
WHERE devicetype != 'Other'
GROUP BY devicetype
ORDER BY total_rev DESC
```



# QUESTION 5

Urutkan dari ke-5 produk ini berdasarkan nilai transaksinya.

1. Samsung
2. Apple
3. Sony
4. Huawei
5. Lenovo

Gunakan *is\_vaild* = 1 untuk memfilter data transaksi.

Soruce table: *order\_detail*, *sku\_detail*

## QUERY

devicetype	total_rev
Samsung	588764148
Apple	448892102
Sony	63960718
Huawei	63160260
Lenovo	62379800.4

**Produk tertinggi berdasarkan nilai transaksinya adalah Samsung, sedangkan produk terendah adalah Lenovo.**



**THANK YOU**

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