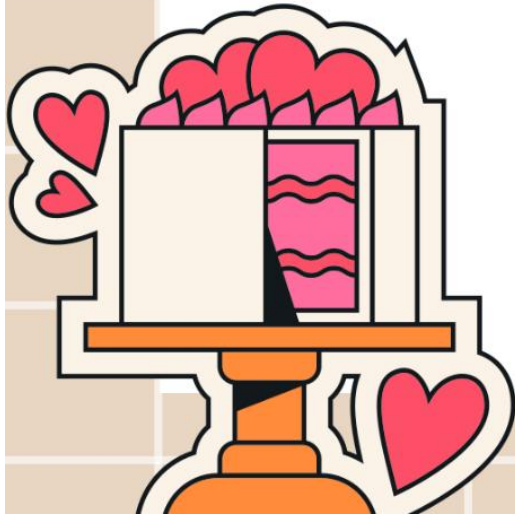


VALENTINE'S DAY CHOCOLATE SALES

SQL CHALLENGE



@ Digits n Data
@ Nitish Kumar



TABLES

countries

Columns (2)

- country_id
- country_name

products

Columns (3)

- product_id
- product_name
- brand

sales

Columns (6)

- sale_id
- product_id
- country_id
- sale_date
- quantity_sold
- revenue





QUESTIONS

- 1) Find the product with the highest average revenue per sale?
- 2) Find the product with the highest total revenue?
- 3) Determine the month with the highest total revenue across all sales?

CREATE A LINKEDIN POST. ENSURE THAT YOU TAG @DIGITS N DATA AND @NITISH KUMAR TO LET ME KNOW HOW YOU GET ON!



Q1: Find the product with the highest average revenue per sale?

```
SELECT product_name, ROUND(AVG(revenue), 2) AS avg_rev
FROM products
JOIN sales ON products.product_id = sales.product_id
GROUP BY product_name
HAVING AVG(revenue) = (
    SELECT MAX(avg_rev)
    FROM (
        SELECT product_name, AVG(revenue) AS avg_rev
        FROM products
        JOIN sales ON products.product_id = sales.product_id
        GROUP BY product_name
    ) AS subquery
);
```



OUTPUT

product_name	avg_rev
character varying (100)	numeric
M&M's	1000.00
Nestlé Toll House Chocolate Chips	1000.00
Lindt Excellence	1000.00
Cadbury Dairy Milk Silk Oreo Red Velvet	1000.00
Cadbury Bournvita	1000.00
Cadbury Dairy Milk Miniatures	1000.00

Q2: FIND THE PRODUCT WITH THE HIGHEST TOTAL REVENUE?

-- Method 1 ----

```
SELECT product_name, SUM(revenue) AS total_rev
  FROM products
 JOIN sales ON products.product_id = sales.product_id
 GROUP BY product_name
 ORDER BY 2 DESC
 LIMIT 1;
```

product_name		total_rev	
character varying (100)	🔒	numeric	🔒
Cadbury Dairy Milk Silk Hazelnut		1150.00	



-- Method 2 -----

```
SELECT product_name, SUM(total_rev) AS total_rev
FROM (
    SELECT product_name, SUM(revenue) AS total_rev,
           RANK() OVER(ORDER BY SUM(revenue) DESC) AS rank
    FROM sales
    JOIN products ON products.product_id = sales.product_id
    GROUP BY product_name
) AS subquery      --- adding alies(subquery) for referencing SQL

WHERE rank = 1
GROUP BY product_name;
```

product_name		total_rev	
character varying (100)	🔒	numeric	🔒
Cadbury Dairy Milk Silk Hazelnut		1150.00	



Q3: DETERMINE THE MONTH WITH THE HIGHEST TOTAL REVENUE ACROSS ALL SALES?

-- Method 1 ---

```
SELECT
    EXTRACT(MONTH FROM sale_date) AS month,
    SUM(revenue) AS total_Revenue
FROM
    sales
GROUP BY
    EXTRACT(MONTH FROM sale_date)
ORDER BY
    total_Revenue DESC;
```

month	total_revenue
numeric	numeric
2	25925.00



IF YOU ARE USING ANY DATABASE TOOLS OTHER THAN POSTGRESQL YOU CAN USE MONTHNAME(), DATENAME() ,
FORMAT() FOR GETTING THE MONTHNAME.....BUT FOR POSTGRESQL USERS YOU HAVE TO USE TO_CHAR().

-- Method 2

```
SELECT TO_CHAR(sale_date, 'Month') AS Month_Name,  
       SUM(revenue) AS total_Revenue  
FROM sales  
GROUP BY TO_CHAR(sale_date, 'Month')  
ORDER BY total_Revenue DESC;
```

month_name	total_revenue
text	numeric
February	25925.00



THANK YOU

TO SEE MORE OF THESE KINDS OF CHALLENGES , FOLLOW ME



Sannidhya Das

