



E-commerce Dataset Analysis Using MySQL

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"This project showcases key insights derived from an e-commerce dataset using SQL to answer critical business questions."

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INTRODUCTION

Describe the dataset briefly:-

The dataset contains information about product categories, sales, discounts, payment methods, and revenue details from an e-commerce store

Goal:

o analyze the dataset and provide actionable insights to understand sales trends, revenue generation, and customer preferences.

Tools:

MySQL and Canva for presentation.



```
# 1. What is the total number of purchases made in the "Sports" category?  
use ecommerce_dataset;  
SELECT COUNT(*) AS total_purchases  
FROM online_sales  
WHERE category = 'Sports';
```



Output

Result Grid		Filter Rows:
	total_purchases	
▶	520	

2. Calculate the average discount percentage for all products.

```
SELECT avg(Discount)/100 as avg_discount FROM online_sales;
```

Output

Result Grid				Filter Rows:	<input type="text"/>	Export
	avg_discount					
▶	0.18825137					

```
# 3. Which payment method was used most frequently?
SELECT payment_method ,count(user_id) as total_transction
FROM online_sales
group by payment_method ;

SELECT payment_method,count(user_id) as total_transction
FROM online_sales
group by Payment_method
order by total_transction desc
limit 1;
```

Output



payment_method	total_transction
Net Banking	716
Credit Card	760
UPI	757
Cash on Delivery	696
Debit Card	731

payment_method	total_transction
Credit Card	760

4. What is the total revenue generated from purchases?

```
SELECT sum(final_price) as total_purchase  
FROM online_sales;
```

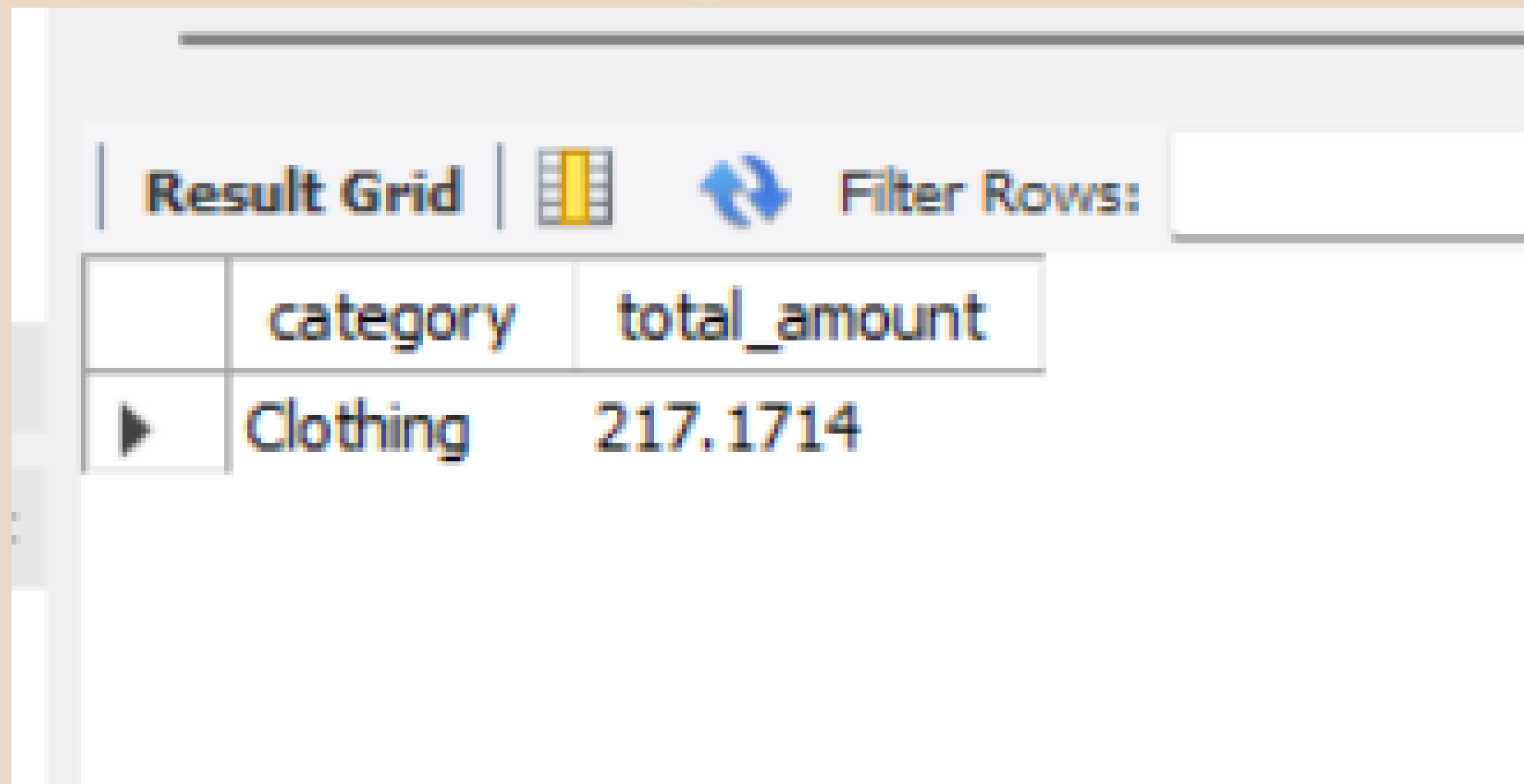
Output

Result Grid				Filter Rows:	<input type="text"/>	E
	total_purchase					
▶	757276					

5. Identify the category with the highest average final price.

```
SELECT category , avg(final_price) as total_amount  
FROM online_sales  
group by category  
order by total_amount desc  
limit 1;
```

Output





The screenshot shows a database interface with a 'Result Grid' tab. The grid displays the results of the SQL query, with columns 'category' and 'total_amount'. The first row shows 'Clothing' with a 'total_amount' of 217.1714. The interface includes a 'Filter Rows' button and a search input field.

	category	total_amount
▶	Clothing	217.1714

```
# 6.    How many products were purchased using "Credit Card"?  
SELECT payment_method, count(user_id) as total_product  
FROM online_sales  
group by payment_method  
having payment_method= "credit card";
```

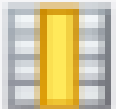

Output

Result Grid   Filter Rows:		
	payment_method	total_product
▶	Credit Card	760

7. On which date was the maximum revenue generated?

```
SELECT purchase_date, sum(final_price) as total_amount  
FROM online_sales  
group by purchase_date  
order by total_amount desc  
limit 1;
```

Output

Result Grid   Filter Rows: <input data-bbox="2179 1039 2572 1166" type="text"/>		
	purchase_date	total_amount
▶	18-07-2024	4697

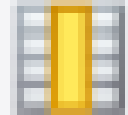

```
# 9.    What is the highest discount percentage given, and for which product category?  
  
SELECT  
category,  
(sum(discount)/sum(final_price))*100 as total_percentage  
FROM online_sales  
group by category  
order by total_percentage desc  
limit 1;
```

Output

Result Grid			Filter Rows:	
	category	total_percentage		
▶	Home & Kitchen	9.7562		

```
#10. Calculate the total revenue generated from the "Clothing" category purchases.  
SELECT category,  
sum(final_price) as total_price  
FROM online_sales  
where category = "Clothing"  
GROUP BY category
```

Output


Result Grid   Filter Rows: <input type="text"/>		
	category	total_price
▶	Clothing	115318

Summarize your findings:

This project provided critical insights into customer preferences, sales trends, and revenue streams."
"Key highlights include identifying top-performing categories, preferred payment methods, and peak revenue days."

what I am learned:

"Enhanced SQL querying skills and gained deeper knowledge of e-commerce data analysis."



Thank you for taking the time to explore my project!
I'm excited about the potential of data analytics to
drive business decisions and look forward to
continuing my learning journey.
Feel free to connect with me for any queries or
collaboration opportunities!

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