



WsCubetech - Cohort 5

Week 4 - Case Study

AMAZON SALES DATA

Binay Kumar Naik

5 May, 2025



PROJECT OVERVIEW

You are working at Amazon, a leading e-commerce platform. The management has tasked you with analyzing sales data by performing different queries in sql.



Problem Statements

1. List all products with a discounted price below ₹500.
2. Find products with a discount percentage of 50% or more.
3. Retrieve all products where the name contains the word "Cable."
4. Display the difference between the average of the actual price and the average of discounted price for each product.
5. Query reviews that mention "fast charging" in their content.
6. Identify products with a discount percentage between 20% and 40%.
7. Find products that have an actual price above ₹1,000 and are rated 4 stars or above.
8. Find products where the discounted price ends with a 9 ?
9. Display review contents that contains words like worst, waste, poor, or not good.
10. List all products where the category includes "Accessories."

Table Overview

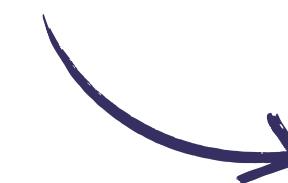
```
1 •  use amazon_sales;
2 •  select * from mytable;
3
4     -- col_count
5 •  select count(*) as col_count
6  from information_schema.columns
7  where table_name = 'mytable'
8  AND table_schema = 'amazon_sales';
9
10    -- row_count
11 •  select count(*) as row_count
12  from mytable;
```

Table: mytable

Columns:

product_id	varchar(1024)
product_name	varchar(1024)
category	varchar(1024)
discounted_price	double
actual_price	double
discount_percentage	double
rating	double
rating_count	double
about_product	text
user_id	varchar(1024)
user_name	varchar(1024)
review_id	varchar(1024)
review_title	varchar(1024)
review_content	text
img_link	varchar(1024)
product_link	varchar(1024)

- There are 16 cols and 1465 rows

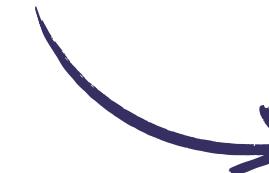


	row_count
▶	1465

	col_count
▶	16

01 List all products with a discounted price below ₹500.

```
1 # 1. List all products with a discounted price below ₹500.  
2  
3 • select product_name, discounted_price  
4   from mytable  
5   where discounted_price < 500;
```

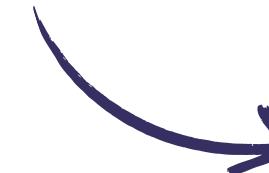


	product_name	discounted_price
▶	Wayona Nylon Braided USB to Lightning Fast Ch...	399
	Ambrane Unbreakable 60W / 3A Fast Charging ...	199
	Sounce Fast Phone Charging Cable & Data Sync...	199
	boAt Deuce USB 300 2 in 1 Type-C & Micro USB ...	329
	Portronics Konnect L 1.2M Fast Charging 3A 8 P...	154
	pTron Solero TB301 3A Type-C Data and Fast C...	149
	boAt Micro USB 55 Tangle-free, Sturdy Micro US...	176.63
	MI Usb Type-C Cable Smartphone (Black)	229
	TP-Link USB WiFi Adapter for PC(TL-WN725N), ...	499
	Ambrane Unbreakable 60W / 3A Fast Charging ...	199
	Portronics Konnect L POR-1081 Fast Charging 3...	154
	boAt Rugged v3 Extra Tough Unbreakable Braid...	299

- There are **576** products with a discounted price below ₹500/-

02 Find products with a discount percentage of 50% or more.

```
1 # 2. Find products with a discount percentage of 50% or more.  
2  
3 • select product_name, discount_percentage  
4 from mytable  
5 where discount_percentage >= 0.5;
```



	product_name	discount_percentage
	pTron Solero MB301 3A Micro USB Data & Charg...	0.85
	Amazonbasics Nylon Braided Usb-C To Lightning...	0.53
	Sounce 65W OnePlus Dash Warp Charge Cable,...	0.8
	Duracell Type C To Type C 5A (100W) Braided S...	0.51
	AmazonBasics USB 2.0 Cable - A-Male to B-Male...	0.7
	Wayona Nylon Braided 3A Lightning to USB A S...	0.64
	FLiX (Beetel USB to Micro USB PVC Data Sync & ...	0.7
	Wecool Nylon Braided Multifunction Fast Chargi...	0.67
	D-Link DWA-131 300 Mbps Wireless Nano USB A...	0.58

- There are 751 products with a dicount percentage of 50% or more.

03 Retrieve all products where the name contains the word "Cable."

```
1 # 3. Retrieve all products where the name contains the word "Cable."  
2  
3 • select product_name  
4 from mytable  
5 where product_name like '%Cable%';
```



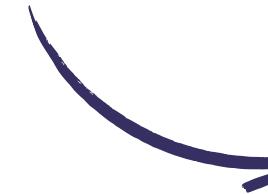
	product_name
▶	Wayona Nylon Braided USB to Lightning Fast Ch...
	Ambrane Unbreakable 60W / 3A Fast Charging ...
	Source Fast Phone Charging Cable & Data Sync...
	boAt Deuce USB 300 2 in 1 Type-C & Micro USB ...
	Portronics Konnect L 1.2M Fast Charging 3A 8 P...
	pTron Solero TB301 3A Type-C Data and Fast C...
	boAt Micro USB 55 Tangle-free, Sturdy Micro US...

- There are 304 products with the word cable in it.

04

Display the difference between the average of the actual price and the average of discounted price for each product.

```
1 # 4. Display the difference between the average of the actual price and the average of discounted price for each product.  
2  
3 • select product_name,  
4 avg(actual_price),  
5 avg(discounted_price),  
6 (avg(actual_price) - avg(discounted_price)) as 'avg_price_diff'  
7 from mytable  
8 group by product_name;
```



	product_name	avg(actual_price)	avg(discounted_price)	avg_price_diff
▶	Wayona Nylon Braided USB to Lightning Fast Ch...	1099	399	700
	Ambrane Unbreakable 60W / 3A Fast Charging ...	349	199	150
	Source Fast Phone Charging Cable & Data Sync...	1299	199	1100
	boAt Deuce USB 300 2 in 1 Type-C & Micro USB ...	699	329	370
	Portronics Konnect L 1.2M Fast Charging 3A 8 P...	399	154	245
	pTron Solero TB301 3A Type-C Data and Fast C...	1000	149	851
	boAt Micro USB 55 Tangle-free, Sturdy Micro US...	499	176.63	322.37
	MI Usb Type-C Cable Smartphone (Black)	299	229	70
	TP-Link USB WIFI Adapter for PC(TL-WN725N), ...	999	499	500
	Ambrane Unbreakable 60W / 3A Fast Charging ...	299	199	100

05 Query reviews that mention "fast charging" in their content.

```
1 # 5. Query reviews that mention "fast charging" in their content.  
2  
3 • select review_content  
4 from mytable  
5 where review_content like "%fast charging%";
```



	review_content
▶	I ordered this cable to connect my phone to Android Auto of car. The cable is really strong and the conn...
	Good product,long wire,Charges good,Nice,I bought this cable for Rs.339 worthy product for this price,...
	I ordered this cable to connect my phone to Android Auto of car. The cable is really strong and the conn...
	The cable is efficient in fast charging but in quick data transfer. Overall fine.,I like the usb c L shape. N...
	Good product,long wire,Charges good,Nice,I bought this cable for Rs.339 worthy product for this price,...
	Definitely isn't as good as the original cord but works. Fast charging and pretty sturdy,Worth it,So I had...
	I like it ⚡⚡,Best charging power . I used this cable on note 8 pro mi. Using 8month also fast working.,3...
	I ordered this cable to connect my phone to Android Auto of car. The cable is really strong and the conn...

06 Identify products with a discount percentage between 20% and 40%.

```
1 # 6. Identify products with a discount percentage between 20% and 40%.  
2  
3 • select product_name ,discount_percentage  
4 from mytable  
5 where discount_percentage between 0.2 and 0.4;
```



	product_name	discount_percentage
▶	MI Usb Type-C Cable Smartphone (Black)	0.23
	Ambrane Unbreakable 60W / 3A Fast Charging ...	0.33
	Ambrane Unbreakable 60W / 3A Fast Charging ...	0.38
	LG 80 cm (32 inches) HD Ready Smart LED TV 3...	0.39
	OnePlus 80 cm (32 inches) Y Series HD Ready L...	0.25
	Ambrane Unbreakable 3 in 1 Fast Charging Brai...	0.25
	OnePlus 126 cm (50 inches) Y Series 4K Ultra H...	0.28
	TP-Link Nano AC600 USB Wi-Fi Adapter(Archer ...	0.38
	Amazon Basics High-Speed HDMI Cable, 6 Feet ...	0.35
	OnePlus 80 cm (32 inches) Y Series HD Ready S...	0.27

- There are 352 products with discount percentage between 20% and 40%.

07 Find products that have an actual price above ₹1,000 and are rated 4 stars or above.

```
1 # 7. Find products that have an actual price above ₹1,000 and are rated 4 stars or above.  
2  
3 • select product_name, actual_price, rating  
4 from mytable  
5 where actual_price > 1000  
6 and rating >= 4;
```



	product_name	actual_price	rating
▶	Wayona Nylon Braided USB to Lightning Fast Ch...	1099	4.2
	MI 80 cm (32 inches) 5A Series HD Ready Smart...	24999	4.2
	LG 80 cm (32 inches) HD Ready Smart LED TV 3...	21990	4.3
	Duracell USB Lightning Apple Certified (Mfi) Brai...	1799	4.5
	Samsung 80 cm (32 Inches) Wondertainment Se...	22900	4.3
	Acer 80 cm (32 inches) I Series HD Ready Andr...	19990	4.3
	OnePlus 80 cm (32 inches) Y Series HD Ready L...	19999	4.2
	Duracell USB C To Lightning Apple Certified (Mfi)...	1999	4.4
	Zoul USB C 60W Fast Charging 3A 6ft/2M Long ...	1099	4.3
	Amazonbasics Nylon Braided Usb-C To Lightning...	1900	4.4
	OnePlus 126 cm (50 inches) Y Series 4K Ultra H...	45999	4.2

- There are **709** products with that have an actual price above ₹1,000 and are rated 4 stars or above.

08 Find products where the discounted price ends with a 9 ?

```
1 # 8. Find products where the discounted price ends with a 9 ?  
2  
3 • select product_name, discounted_price  
4 from mytable  
5 where discounted_price like "%9";
```



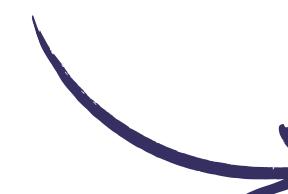
product_name	discounted_price
Wayona Nylon Braided USB to Lightning Fast Ch...	399
Ambrane Unbreakable 60W / 3A Fast Charging ...	199
Sounce Fast Phone Charging Cable & Data Sync...	199
boAt Deuce USB 300 2 in 1 Type-C & Micro USB ...	329
pTron Solero TB301 3A Type-C Data and Fast C...	149
MI Usb Type-C Cable Smartphone (Black)	229
TP-Link USB WiFi Adapter for PC(TL-WN725N), ...	499
Ambrane Unbreakable 60W / 3A Fast Charging ...	199
boAt Rugged v3 Extra Tough Unbreakable Braid...	299
AmazonBasics Flexible Premium HDMI Cable (Bla...	219
Portronics Konnect L 1.2M POR-1401 Fast Char...	159
MI Braided USB Type-C Cable for Charging Ada...	349

- There are 1000 products where the discounted price ends with a 9.

09

Display review contents that contains words like worst, waste, poor, or not good.

```
1 # 9. Display review contents that contains words like worst, waste, poor, or not good.  
2  
3 • select review_content  
4 from mytable  
5 where review_content like "%worst%"  
6 or review_content like "%waste%"  
7 or review_content like "%poor%"  
8 or review_content like "%not good%";
```



review_content
► Worth for money - suitable for Android auto... my purpose served in car....got it for Rs.150,Everything is Okay. But packaging is n...
Check for offera before buying, 18w charging cable,,Awesome cable!Charging, data transfer and durability is simply awesome, and...
LG was always Good , correct delivery, good service but sound quality was poor. The speakers were fitted below the tv. No clear s...
This connector has provided as a boon for my old Samsung LCD monitor and I am proactively using that monitor as the 2nd screen j...
Overall good.,TV picture ok smart betterSound very low another brand,Service provider refuse install my TV, bad service and sams...
About the TV - Wonderful-----Probably the best TV in this price range (INR 13000)....
This OnePlus TV is great if you want a affordable and middle range features TV. I got it in the offer and it was totally worth it.Pros:...
Buy it,Received in good condition and is working properly,This price cabil not good, and also short,I am using from 2 months and ch...
I am posting this after a few weeks of using the product.Usage: Continuous, OTT only, no Cable/Dish operator.Average daily usag...
NOTE:@ If you select brand-authorized TV installation, then DO NOT unbox the tv until MI representative arrives.This ensures, tha...
Overall replacement of original samsung remote.its compatible easily with my samsung uhd tv.but there is no voice command in the ...

10 List all products where the category includes "Accessories."

```
1 # 10 . List all products where the category includes "Accessories."  
2  
3 • select product_name, category  
4 from mytable  
5 where category like "%Accessories%";
```



	product_name	category
▶	Wayona Nylon Braided USB to Lightning Fast Ch...	Computers&Accessories Accessories&Peripheral...
	Ambrane Unbreakable 60W / 3A Fast Charging ...	Computers&Accessories Accessories&Peripheral...
	Source Fast Phone Charging Cable & Data Sync...	Computers&Accessories Accessories&Peripheral...
	boAt Deuce USB 300 2 in 1 Type-C & Micro USB ...	Computers&Accessories Accessories&Peripheral...
	Portronics Konnect L 1.2M Fast Charging 3A 8 P...	Computers&Accessories Accessories&Peripheral...
	pTron Solero TB301 3A Type-C Data and Fast C...	Computers&Accessories Accessories&Peripheral...
	boAt Micro USB 55 Tangle-free, Sturdy Micro US...	Computers&Accessories Accessories&Peripheral...
	MI Usb Type-C Cable Smartphone (Black)	Computers&Accessories Accessories&Peripheral...
	TP-Link USB WiFi Adapter for PC(TL-WN725N), ...	Computers&Accessories NetworkingDevices Ne...
	Ambrane Unbreakable 60W / 3A Fast Charging ...	Computers&Accessories Accessories&Peripheral...

- There are **890** products where the category includes "Accessories".

THANK YOU

You can check my **github** link for the detailed project:

<https://github.com/Binay005X/Amazon-Sales-SQL>

