Presented By Manish Kumar

Introduction

- **Dataset:** Amazon product sales data
- **Columns:** product name, category, price, discount, rating, reviews etc.
- **Total rows:** 1465
- **Unique products:** 1337
- **Objective:** Write SQL queries to analyze products, discounts & reviews

Q1 List all products with a discounted price below ₹500

```
Select  Product_name , Discounted_price

From Amazon

Where Discounted_price < 500;
```

product_name	discounted_price
Wayona Nylon Brai...	399
Ambrane Unbreaka...	199
Sounce Fast Phone ...	199
boAt Deuce USB 30...	329
Portronics Konnect ...	154
pTron Solero TB301...	149
boAt Micro USB 55 ...	176.63
MI Usb Type-C Cabl...	229
TP-Link USB WiFi Ad...	499
Ambrane Unbreaka...	199
Portronics Konnect ...	154
boAt Rugged v3 Ex...	299
AmazonBasics Flexi...	219
Portronics Konnect ...	350
Portronics Konnect ...	159
MI Braided USB Typ...	349
Ambrane Unbreaka...	249

Output

Q2 Find products with a discount percentage of 50% or more

```
Select Product_name, Discount_percentage

From Amazon

Where Discount_percentage >= 0.05

Order By Discount_percentage Desc;
```

product_name	discount_percentage
rts [2 Pack] Mini US...	0.94
Fire-Boltt Ninja Call ...	0.91
Fire-Boltt Ninja Call ...	0.91
Fire-Boltt Ninja Call ...	0.91
Fire-Boltt Ninja Call ...	0.91
Fire-Boltt Ninja Call ...	0.91
Sounce Fast Phone ...	0.9
Sounce Spiral Char...	0.9
Sounce Protective ...	0.9
LAPSTER 12pcs Spir...	0.9
LAPSTER Spiral Cha...	0.9
Sounce Spiral Char...	0.9
Silicone Rubber Ear...	0.9
beatXP Kitchen Scal...	0.9
pTron Solero M241 ...	0.89
PTron Solero T241 ...	0.88
Rts™ High Speed 3...	0.88
pTron Solero T241	0.88

Output

Q3 Retrieve products where name contains “Cable”

```
select product_name

from amazon

where product_name like '%cable%' ;
```

	product_name
	Wayona Nylon Brai...
	Ambrane Unbreaka...
	Sounce Fast Phone ...
	boAt Deuce USB 30...
	Portronics Konnect ...
	pTron Solero TB301...
	boAt Micro USB 55 ...
	MI Usb Type-C Cabl...
	Ambrane Unbreaka...
	Portronics Konnect ...
	boAt Rugged v3 Ex...
	AmazonBasics Flexi...
	Portronics Konnect ...
	Portronics Konnect ...
	MI Braided USB Typ...
	Ambrane Unbreaka...
	boAt Type C A325 ...

Output

Q4 Difference between average actual & discounted price per product

```
select product_name, avg(actual_price) - avg(discounted_price)
As price_difference
from amazon
group by product_name
order by price_difference desc;
```

	product_name	price_difference
▶	Sony Bravia 164 cm...	61910
	Coway Professional...	45500
	Samsung Galaxy S2...	37009
	VU 138 cm (55 inch...	35010
	LG 1.5 Ton 5 Star A...	33000
	LG 139 cm (55 inch...	32000
	ECOVACS DEEBOT ...	32000
	VU 164 cm (65 inch...	30010
	VU 139 cm (55 inch...	27001
	TCL 108 cm (43 inc...	27000
	AmazonBasics 108 ...	25501
	Hisense 108 cm (43...	24000
	Samsung 138 cm (5...	23901
	Sansui 140cm (55 in...	23800
	MI 138.8 cm (55 inc...	23000

Output

Q5 Query reviews that mention "fast charging" in their content.

```
select product_name, review_content

from amazon

where review_content like ' %fast charging% ' ;
```

product_name	review_content
Ambrane Unbreaka...	I ordered this cable to connect my phone to An...
boAt Deuce USB 30...	Good product,long wire,Charges good,Nice,I bo...
Ambrane Unbreaka...	I ordered this cable to connect my phone to An...
Portronics Konnect ...	The cable is efficient in fast charging but in quic...
boAt Rugged v3 Ex...	Good product,long wire,Charges good,Nice,I bo...
Portronics Konnect ...	Definitely isn't as good as the original cord but ...
MI Braided USB Typ...	I like it 👍👍,Best charging power . I used this c...
Ambrane Unbreaka...	I ordered this cable to connect my phone to An...
boAt Type C A325 ...	Check for offera before buying,18w charging c...
Flix Micro Usb Cable...	Worked on iPhone 7 and didn't work on iPhone ...
Ambrane Unbreaka...	The product seems and works good but it's not ...
Duracell USB C To Li...	Fast charging.,Cable seems to be of good qualit...
boAt A400 USB Typ...	One amazing cable for 300 bucks,Ok with chargi...
Samsung Original T...	Buy it,Received in good condition and is working...
pTron Solero T351 ...	It's a good data cable and I recommend it to pu...
Duracell Type C To ...	Same type is available in half prize other make o...
FLiX (Beetel USB to ...	Worked on iPhone 7 and didn't work on iPhone ...
Wecool Nylon Braid ...	Charging power is very less. It takes hours to c...

Output

Q6 Identify products with a discount percentage between 20% and 40%.

```
select product_name, discount_percentage

from amazon

where discount_percentage between 0.02 And 0.04

order by discount_percentage desc;
```

product_name	discount_percentage
Samsung Galaxy M...	0.04
HP 682 Black Origin...	0.04
Havells Bero Quartz...	0.04
Philips HD6975/00 2...	0.04
Philips Hi113 1000-...	0.03
Kent Gold, Optima, ...	0.03
CARDEX Digital Kitc...	0.03
Classmate Soft Cov...	0.02
Classmate Soft Cov...	0.02

Output

Q7 Products with price > ₹1000 and rating ≥ 4

```
select product_name, actual_price, rating

from amazon

where actual_price >1000 And rating >=4

order by rating;
```

product_name	actual_price	rating
Firestick Remote	3999	4
Saifsmart Outlet W...	1299	4
AmazonBasics Digit...	1600	4
Electvision Remote ...	1999	4
WZATCO Pixel | Por...	9990	4
Wayona 3in1 Nylon...	1099	4
Cubetek 3 in 1 LCD ...	3100	4
VW 80 cm (32 inche...	18999	4
VU 108 cm (43 inch...	35000	4
PROLEGEND® PL-T...	4500	4
Redmi A1 (Light Blu...	8999	4
Redmi A1 (Black, 2...	8999	4
Redmi A1 (Light Gre...	8999	4
Nokia 105 Single SI...	1599	4
Redmi 10A (Charco...	11999	4
pTron Bullet Pro 36...	1299	4
Noise ColorFit Pulse...	3999	4
iQOO vivo Z6 5G (C...	20999	4

Output

Q8 Products where discounted price ends with 9

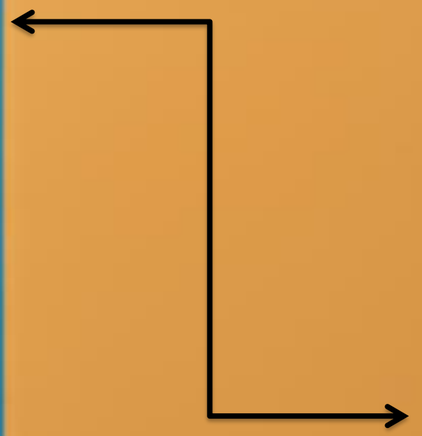
```
select product_name, discounted_price

From amazon

where discounted_price like '%9'

order by discount_percentage desc;
```

	product_name	discounted_price
▶	Fire-Boltt Ninja Call ...	1799
	Fire-Boltt Ninja Call ...	1799
	Fire-Boltt Ninja Call ...	1799
	Fire-Boltt Ninja Call ...	1799
	Fire-Boltt Ninja Call ...	1799
	Sounce Fast Phone ...	199
	Sounce Spiral Char...	99
	Sounce Protective ...	199
	LAPSTER 12pcs Spir...	99
	LAPSTER Spiral Cha...	99
	Sounce Spiral Char...	99
	Silicone Rubber Ear...	99
	beatXP Kitchen Scal...	199
	pTron Solero M241 ...	89
	PTron Solero T241 ...	99
	pTron Solero T241 ...	99
	Croma 3A Fast char...	129
	CIZCA essentials U...	39

Output

Q9 Negative reviews (worst, waste, poor, not good)

```
SELECT product_name, review_content

FROM amazon

WHERE review_content LIKE '%worst%'   OR

review_content LIKE '%waste%'   OR

review_content LIKE '%poor%'   OR

review_content LIKE '%not good%' ;
```



product_name	review_content
MI Usb Type-C Cabl...	Worth for money - suitable for Android auto... ...
boAt Type C A325 ...	Check for offera before buying, 18w charging c...
LG 80 cm (32 inches...	LG was always Good , correct delivery, good se...
tizum HDMI to VGA ...	This connector has provided as a boon for my ol...
Samsung 80 cm (32...	Overall good.,TV picture ok smart betterSound ...
Acer 80 cm (32 inch...	About the TV - Wonderful----------...
OnePlus 80 cm (32 i...	This OnePlus TV is great if you want a affordabl...
Samsung Original T...	Buy it,Received in good condition and is working...
OnePlus 126 cm (50...	I am posting this after a few weeks of using the...
Mi 108 cm (43 inche...	NOTE:@ If you select brand-authorized TV inst...
7SEVEN® Compatib...	Overall replacement of original samsung remote...
TP-Link AC600 600 ...	I am using this on an old Mac Mini, since the Bro...
VW 80 cm (32 inche...	I got this for 6k. At this price point, I believe th...
OnePlus 80 cm (32 i...	This OnePlus TV is great if you want a affordabl...
Wecool Unbreakabl...	Good,Got a nice product,Quick not charger,C...
Airtel DigitalTV DTH ...	Nice,Works very well with Airtel DTH. The pairin...
Samsung 108 cm (4...	Before finalizing the AUE60 55", I visited Croma...

Output

Q10 Products where category includes “Accessories”

```
select product_name, category

from amazon

where category like '%Accessories%';
```

product_name	category
Wayona Nylon Brai...	Computers&Accessories|Accessories&Peripheral...
Ambrane Unbreaka...	Computers&Accessories|Accessories&Peripheral...
Sounce Fast Phone ...	Computers&Accessories|Accessories&Peripheral...
boAt Deuce USB 30...	Computers&Accessories|Accessories&Peripheral...
Portronics Konnect ...	Computers&Accessories|Accessories&Peripheral...
pTron Solero TB301...	Computers&Accessories|Accessories&Peripheral...
boAt Micro USB 55 ...	Computers&Accessories|Accessories&Peripheral...
MI Usb Type-C Cabl...	Computers&Accessories|Accessories&Peripheral...
TP-Link USB WiFi Ad...	Computers&Accessories|NetworkingDevices|Ne...
Ambrane Unbreaka...	Computers&Accessories|Accessories&Peripheral...
Portronics Konnect ...	Computers&Accessories|Accessories&Peripheral...
boAt Rugged v3 Ex...	Computers&Accessories|Accessories&Peripheral...
AmazonBasics Flexi...	Electronics|HomeTheater,TV&Video|Accessories...
Portronics Konnect ...	Computers&Accessories|Accessories&Peripheral...
Portronics Konnect ...	Computers&Accessories|Accessories&Peripheral...
MI Braided USB Typ...	Computers&Accessories|Accessories&Peripheral...
Ambrane Unbreaka...	Computers&Accessories|Accessories&Peripheral...
boAt Type C A325	Computers&Accessories|Accessories&Peripheral

Result

Key Insights

- Duplicate product entries exist (1465 rows vs 1337 unique products)
- Many products with 50%+ discounts in Cables & Accessories
- Customers highlight fast charging positively
- Negative reviews include worst, waste, poor quality
- SQL helps identify pricing strategies & customer feedback

Conclusion (Improved)

✅ **SQL Concepts Applied:**

- Filtering: WHERE, LIKE, BETWEEN
- Aggregation: AVG(), GROUP BY, ORDER BY

✅ **Key Learnings:**

- Writing queries to extract meaningful insights
- Handling duplicate product entries
- Analyzing prices, discounts, ratings, and reviews

✅ **Business Value:**

- Helps management with pricing strategy
- Identifies product performance & customer sentiment
- Supports data-driven decision making in e-commerce