

CVS Health is trying to better understand its pharmacy sales, and how well different products are selling. Each drug can only be produced by one manufacturer.

QUESTION 1

Write a query to find the top 3 most profitable drugs sold, and how much profit they made. Assume that there are no ties in the profits. Display the result from the highest to the lowest total profit.

Definition:

- cogs stand for Cost of Goods Sold which is the direct cost associated with producing the drug.
- $\text{Total Profit} = \text{Total Sales} - \text{Cost of Goods Sold}$

The screenshot shows the DataLemur website interface for a SQL interview question. The question is "Pharmacy Analytics (Part 1) [CVS Health SQL Interview Question]". The solution is marked as "Accepted". The user's SQL query is displayed in a code editor, and the output is shown in a table. The output table has two columns: "drug" and "total_profit". The results are:

drug	total_profit
Humira	81515652.55
Keytruda	11622022.02
Dupixent	11217052.34

The "Expected" output is identical to the user's output. The user's submission is also shown at the bottom of the page.

```
1 SELECT
2   drug,
3   (total_sales - cogs) AS total_profit
4
5 FROM pharmacy_sales
6 ORDER BY total_profit DESC
7 LIMIT 3
```

PostgreSQL 14

Run Code Submit

Output

drug	total_profit
Humira	81515652.55
Keytruda	11622022.02
Dupixent	11217052.34

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QUESTION 2

Write a query to find out which manufacturer is associated with the drugs that were not profitable and how much money CVS lost on these drugs.

Output the manufacturer, number of drugs and total losses. Total losses should be in absolute value. Display the results with the highest losses on top.

Accepted

Congrats 🎉 - Share this problem, and your solution, on LinkedIn or Twitter!

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In your post, don't forget to tag Nick Singh, so that he can comment on and share your post with his audience of 90k+ followers on [LinkedIn](#) and 6k+ followers on [Twitter](#) (which will give your post and profile more visibility)!

Output

manufacturer	drug_count	total_loss
Johnson & Johnson	6	894913.13
Eli Lilly	4	447352.90
Biogen	3	417018.89
AbbVie	2	413991.10
Roche	2	159741.62
Bayer	1	28785.28

Expected

manufacturer	drug_count	total_loss
Johnson & Johnson	6	894913.13
Eli Lilly	4	447352.90
Biogen	3	417018.89
AbbVie	2	413991.10
Roche	2	159741.62
Bayer	1	28785.28

```
1 SELECT
2 manufacturer,
3 COUNT(drug) AS drug_count,
4 ABS(SUM(total_sales - cogs)) AS total_loss
5
6 FROM pharmacy_sales
7 WHERE total_sales - cogs <= 0
8 GROUP BY manufacturer
9 ORDER BY total_loss DESC
```

PostgreSQL 14

[Run Code](#) [Submit](#)

Output

manufacturer	drug_count	total_loss
Johnson & Johnson	6	894913.13
Eli Lilly	4	447352.90
Biogen	3	417018.89
AbbVie	2	413991.10
Roche	2	159741.62
Bayer	1	28785.28