



Pharmacy Analytics [p3] (CVS Health)

QUESTION

CVS Health is trying to better understand its pharmacy sales, and how well different products are selling.

Write a query to find the total drug sales for each manufacturer. Round your answer to the closest million, and report your results in descending order of total sales.

Because this data is being directly fed into a dashboard which is being seen by business stakeholders, format your result like this: "\$36 million".

pharmacy_sales Table:

Column Name	Type
product_id	integer
units_sold	integer
total_sales	decimal
cogs	decimal
manufacturer	varchar
drug	varchar

pharmacy_sales Example Input:

product_id	units_sold	total_sales	cogs	manufacturer	drug
94	132362	2041758.41	1373721.70	Biogen	UP and UP
9	37410	293452.54	208876.01	Eli Lilly	Zyprexa
50	90484	2521023.73	2742445.9	Eli Lilly	Dermasorb
61	77023	500101.61	419174.97	Biogen	Varicose Relief
136	144814	1084258.00	1006447.73	Biogen	Burkhart

Step 1: Identify the problem of the case

Write a query to find the total drug sales for each manufacturer. Round your answer to the nearest million and report your results in descending order of total sales. Since this data is being fed directly into the dashboard that business stakeholders are viewing, format your results like this: "\$36 million". The final result returned has the following form:

Column Name	Type
manufacturer	varchar
sale	varchar

Step 2 : Analyze and solve problems

First calculate the total sales of the manufacturers with the `COUNT()` function

```
SELECT manufacturer
      , SUM( total_sales) sale
FROM pharmacy_sales
GROUP BY manufacturer
```

However, the result returned in the form of a number has not been reduced to millions, we use the `ROUND()` function with sale divided by 1000000 to return millions and round. use `||` to add '\$' and 'million' characters to the result. Sort the results in descending order of `sale`.

```
SELECT manufacturer
      , '$'||ROUND(SUM( total_sales)/1000000 ,0)||' million' sale
FROM pharmacy_sales
GROUP BY manufacturer
ORDER BY SUM( total_sales) DESC
```

OUTPUT:

manufacturer	sale
AbbVie	\$114 million
Eli Lilly	\$77 million
Biogen	\$70 million
Johnson & Johnson	\$43 million
Bayer	\$34 million
AstraZeneca	\$32 million
Pfizer	\$28 million
Novartis	\$26 million
Sanofi	\$25 million
Merck	\$25 million
Roche	\$16 million
GlaxoSmithKline	\$4 million