

DAD 220

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QuantificationRMA Data Analysis Report

1: Returns By State

The image displays two screenshots of a web-based IDE (Codio) showing the results of an SQL query. The query is: `mysql> SELECT Customers.State AS State, COUNT(*) AS Returns FROM Orders INNER JOIN RMA on Orders.OrderID = RMA.OrderID INNER JOIN Customers ON Customers.CustomerID = Orders.CustomerID GROUP BY State ORDER BY Returns DESC;`

The left screenshot shows the full result set in a table format. The right screenshot shows the same result set in a more compact, list-like format.

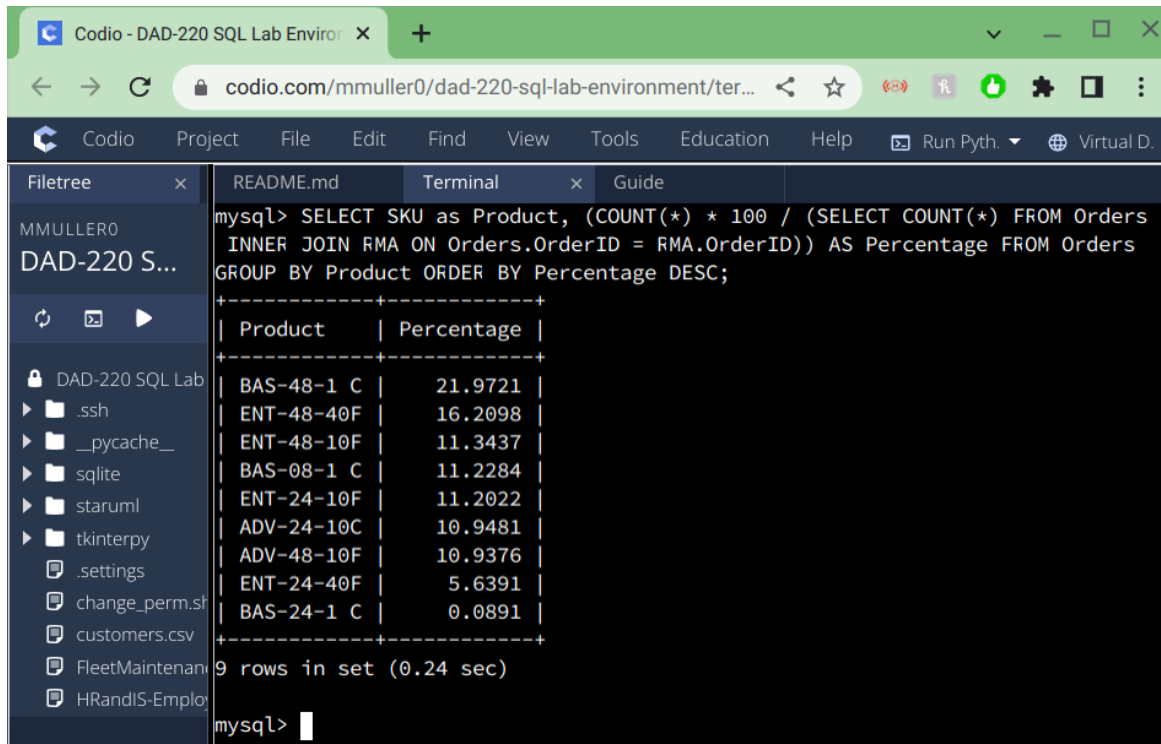
State	Returns
Massachusetts	988
Arkansas	858
West Virginia	851
Oregon	850
Alabama	845
Idaho	839
Connecticut	837
Tennessee	835
Mississippi	834
Delaware	828
Montana	825
Kentucky	823
Wisconsin	823
New Mexico	821
Iowa	816
Pennsylvania	815
Indiana	811
South Dakota	810
Louisiana	803
Minnesota	803
Wyoming	800

State	Returns
Wyoming	800
Vermont	797
Hawaii	797
New York	793
Washington	791
Arizona	790
North Carolina	788
Missouri	786
Maryland	784
North Dakota	779
New Hampshire	776
Florida	776
Rhode Island	775
California	772
Utah	765
Maine	764
Texas	762
Michigan	761
Illinois	761
Oklahoma	759
Nevada	756
Ohio	746
Kansas	735
Nebraska	734
Colorado	731
Georgia	727
New Jersey	727
South Carolina	715

48 rows in set (0.61 sec)

As can be seen in the above data retrieved via SQL queries on the QuantigrationRMA database, Massachusetts experiences the most returns with 988, which is over 100 more than the next state, Arkansas with 858 product returns. The remainder of states are spread fairly evenly from the third highest state, West Virginia with 851 returns to the lowest, South Carolina with 715 returns.

2: Percentage Of Returns By Product



The screenshot shows a web browser window with the address bar displaying 'codio.com/mmuller0/dad-220-sql-lab-environment/ter...'. The browser's address bar and tabs are visible at the top. Below the browser window, there is a terminal window with a dark background. The terminal shows a MySQL command prompt 'mysql>' followed by a query: 'SELECT SKU as Product, (COUNT(*) * 100 / (SELECT COUNT(*) FROM Orders INNER JOIN RMA ON Orders.OrderID = RMA.OrderID)) AS Percentage FROM Orders GROUP BY Product ORDER BY Percentage DESC;'. The query results are displayed in a table format with two columns: 'Product' and 'Percentage'. The results are as follows:

Product	Percentage
BAS-48-1 C	21.9721
ENT-48-40F	16.2098
ENT-48-10F	11.3437
BAS-08-1 C	11.2284
ENT-24-10F	11.2022
ADV-24-10C	10.9481
ADV-48-10F	10.9376
ENT-24-40F	5.6391
BAS-24-1 C	0.0891

Below the table, the terminal shows '9 rows in set (0.24 sec)' and the prompt 'mysql>' is visible again.

The above data shows that the Basic Switch 10/100/1000 BaseT 48 port is the most returned product with 21.97% of returns. This is followed by the Enterprise Switch 40GigE SFP+ 48 port with 16.28% of the returns. The next five products are all at about 11% followed by the two least returned products being the Enterprise Switch 40GigE SFP+ 24 port with 5.64% of returns and the Basic Switch 10/100/1000 BaseT 24 port with only 0.089%.

3. Summary

This data is valuable because it comes from an analysis of the business's current operations. Performing queries on the database allows us to retrieve usable information from the huge amount of data that the business processes much more easily. This information can then be used by the company in order to help them streamline operations. For example, since Massachusetts experiences many more returns, the company may want to check their manufacturers in the state. Also, since BAS-48-1 C is returned more than any other product, that product may need to be reanalysed but BAS-24-1 C is extremely reliable. While this data is useful, it does have its limitations as it does not take any outside factors into account and simply presents an analysis of the company's past orders/returns.