

Non-Conformance Report:

Problem 1:

Description: Missing import statement for the sqlite3 module.

Severity: Low

Impact: Unable to establish a connection with the SQLite database.

Cause: The sqlite3 module was not imported at the beginning of the code.

Prevention: Always include the necessary import statements for required modules.

Estimated Fix: 1 minute

Problem 2:

Description: The date on the x-axis of the line plot was not properly showing.

Severity: Medium

Impact: Unable to read the dates and analyze the graph.

Cause: There are too many dates and they are appearing on top of another.

Prevention: "ax.xaxis.set_major_locator(plt.MaxNLocator(150))" was used to show only 150 dates for better readability

Estimated Fix: 5 minutes

Problem 3:

Description: The query to retrieve top 10 senders was not in order.

Severity: Low

Impact: Unable to take top 10 most frequent senders.

Cause: The "ORDER BY" query did not have any arguments to order it into ascending or descending order.

Prevention: Include ASC for ascending order or DESC for descending order.

Estimated Fix: 2 minutes

Problem 4:

Description: Cannot see the proportions of the different email types on the pie chart.

Severity: Medium

Impact: Could not provide an accurate analysis of the graph.

Cause: The arguments to show the percentage of each email types was missing in the python code.

Prevention: "autopct='%1f%%'" argument was added to solve the issue.

Estimated Fix: 5 minutes

Plan or Time Estimate:

Based on the severity and estimated fix time for each problem, the estimated time to fix all the reported problems is approximately 13 minutes. The plan to fix the problems is as follows:

1. Add the import statement for the sqlite3 module at the beginning of the code.
2. Use the correct arguments to get better readability.
3. Always enter the order arguments if you want to order the data.
4. Add the relevant argument to make the pie chart more readable.

Once these steps were completed, the code was free from the reported problems and ready for execution and analysis.