Project Description:

Welcome to Mobile-Voice-Traffic-PER-TECHNOLOGY!

This repository hosts a collection of Python scripts designed to automate the extraction, analysis, and visualization of telecom network data for a daily report to stakeholders of a Mobile Operator .

Features:

- **Data Retrieval:** Connects to Oracle databases to gather network performance metrics.
- **Analysis & Computation:** Utilizes pandas, numpy, and cx_Oracle libraries to process and compute Erlang traffic, VoLTE percentages, and IMS subscriber statistics.
- **Visualization:** Generates visual representations using matplotlib and seaborn for comprehensive data insights.
- **Reporting Automation:** Daily report generation with charts and insights sent via email using Outlook integration.

Why Explore This Repository?

- **Automation:** Simplify data extraction, analysis, and visualization processes for telecom network metrics.
- **Insights:** Gain valuable insights into Erlang traffic distribution, VoLTE adoption rates, and IMS subscriber trends.
- **Convenience:** Easily access scripts and tools designed to enhance telecom performance monitoring and time saving for daily reports and daily monitoring.

Technologies Used:

- Python
- cx_Oracle, pandas, numpy, openpyxl, matplotlib, seaborn
- Oracle Database
- Outlook integration for email reporting

Contribution Guidelines:

Feel free to contribute by suggesting improvements, reporting bugs, or adding enhancements to the existing scripts. Your contributions are highly appreciated!

Explore the code, experiment, and leverage these tools for enhanced telecom network performance monitoring.