**📄 Stock Market Analysis Project Report**

**Domain:**  
*Stock Market, Financial Data Analysis*

**Tools Used:**  
*Python, Pandas, yFinance, Matplotlib, Seaborn*

**Project Overview:**  
This project analyzes and compares the performance of multiple company stocks using Python. Historical stock data was retrieved using the yFinance library and processed with Pandas to compute key financial indicators such as daily returns, cumulative returns, moving averages, and volatility. The purpose of this project was to understand how different stocks behave over time and uncover actionable patterns in their price trends.

**Key Features:**

* Collected real-time and historical stock data using yFinance
* Calculated daily and cumulative returns for individual stocks
* Applied moving averages (20-day, 50-day) to understand trend direction
* Analyzed volatility to identify stable vs. volatile stocks
* Created visualizations with Matplotlib and Seaborn to display comparisons across stocks and timeframes

**Outcome:**  
The project provided valuable insights into the behavior of stocks over time. It enabled the identification of high-performing and volatile stocks and supported a data-driven approach to investment decisions. This project also improved technical skills in financial data analysis, Python programming, and visualization.