

Certification Assignments - Backend Python Developer

You will be to create a consumer program that analyzes stock data and stores the analysis for future retrieval. The workflow for this task involves the following steps:

Task 1: Create a consumer program that fetches ticker data, saves it in the database, and performs **Moving Average** and **Relative Strength Index (RSI)** analysis on the stock. The results of the analysis should be saved in a collection, and the visualization of this analysis must be stored in the file system. The consumer will accept a JSON input in the following format: `{"ticker":""}`. The path of the visualization image file must be added to the collection where the analysis results are stored.

Task 2: Create a second consumer program that fetches ticker data for multiple stocks, saves it in the database, and performs **Correlation Analysis** on these stocks. The results of the analysis should be saved in a collection, and the visualization of this analysis must be stored in the file system. The consumer will accept a JSON input in the following format: `{"ticker":[""]}`. The path of the visualization image file must be added to the collection where the analysis results are stored.

Task 2: Create a POST API that allows messages to be dropped in the consumer. The API should only be accessible using Nginx.

Testing

Create consumer program test case.