

# Cryptocurrency Realtime Prices Detection

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BADS7205 Data Streaming and Realtime Analytics



# Agenda

01 Proposed Idea & objective

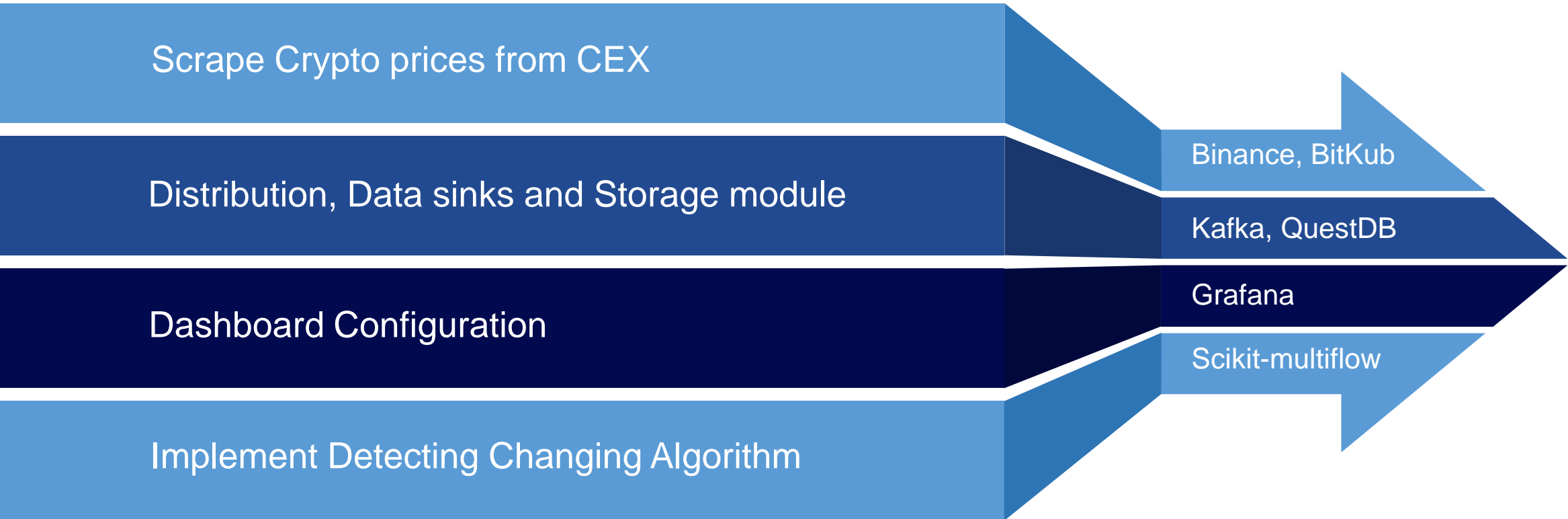
02 Data Flow Diagram

03 Analytics Comparison

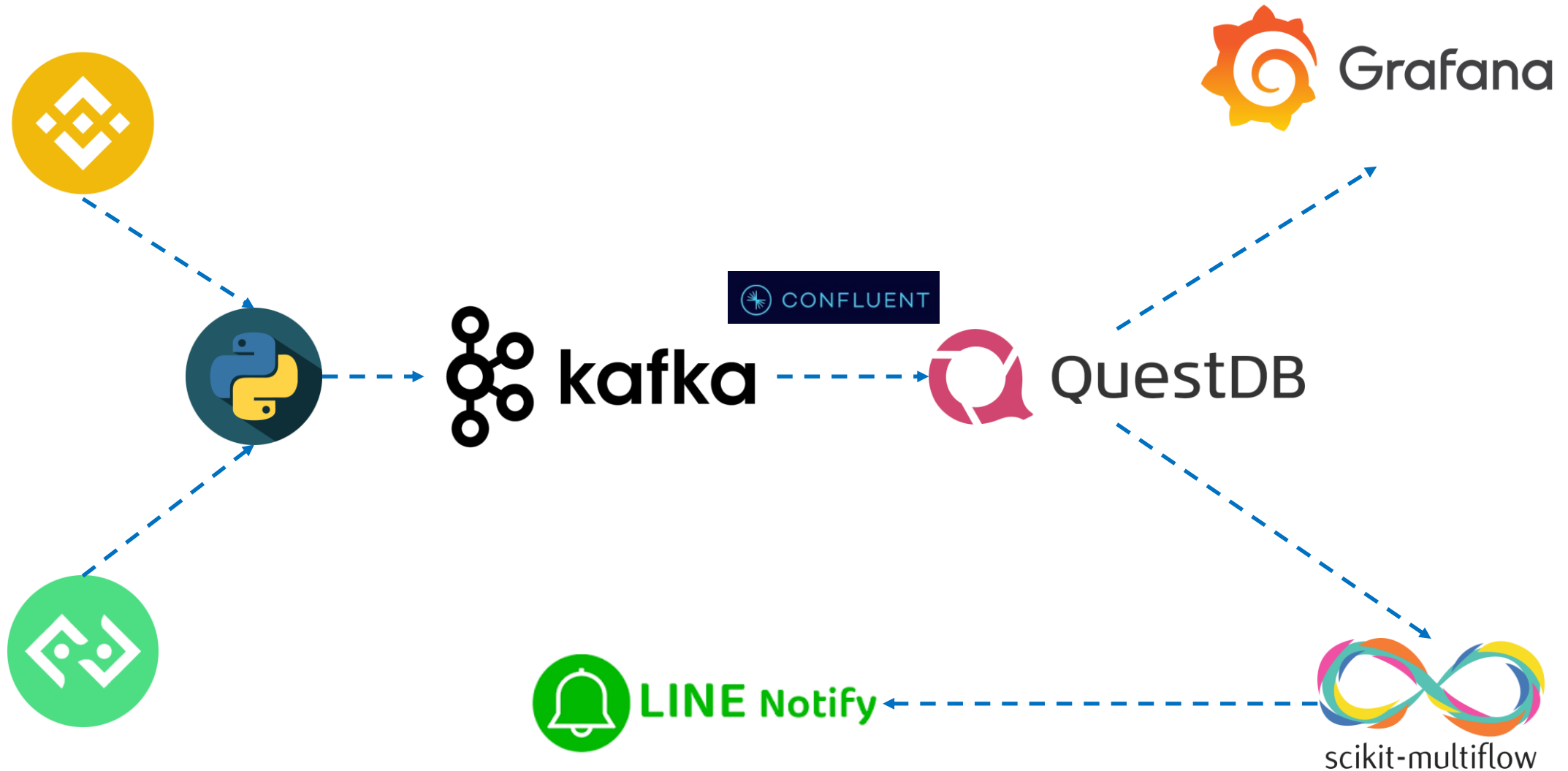
04 Demo



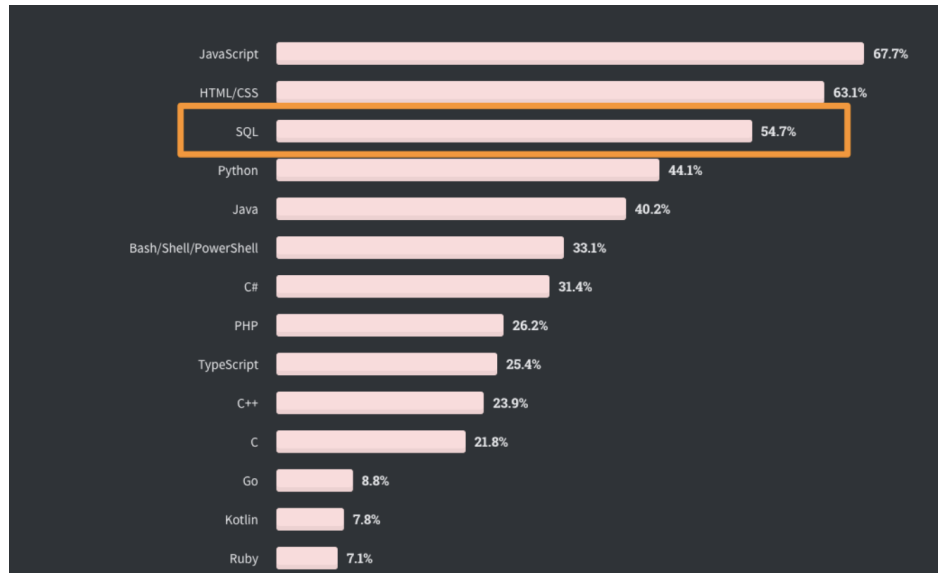
# Proposed Idea & objective



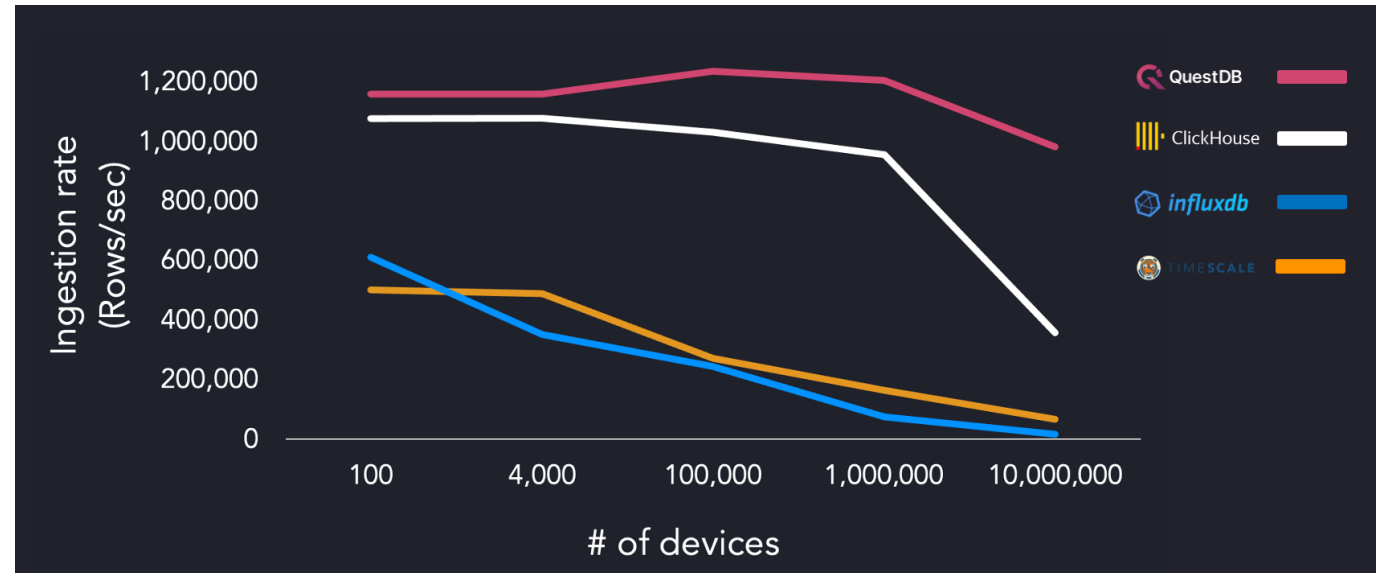
# Data Flow Diagram



# Why choose QuestDB

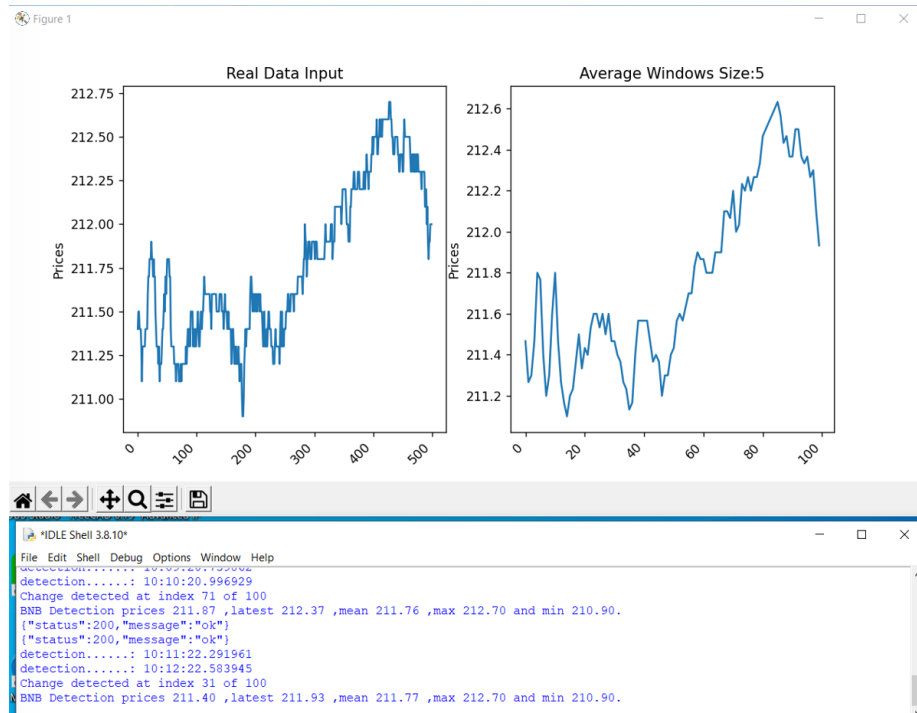


Database and custom language



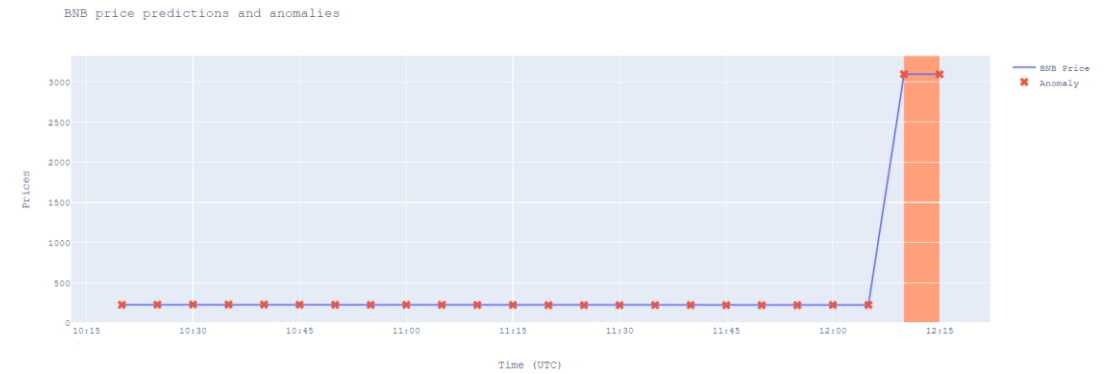
Comparing InfluxDB, TimescaleDB, and QuestDB

# Analytics Comparison



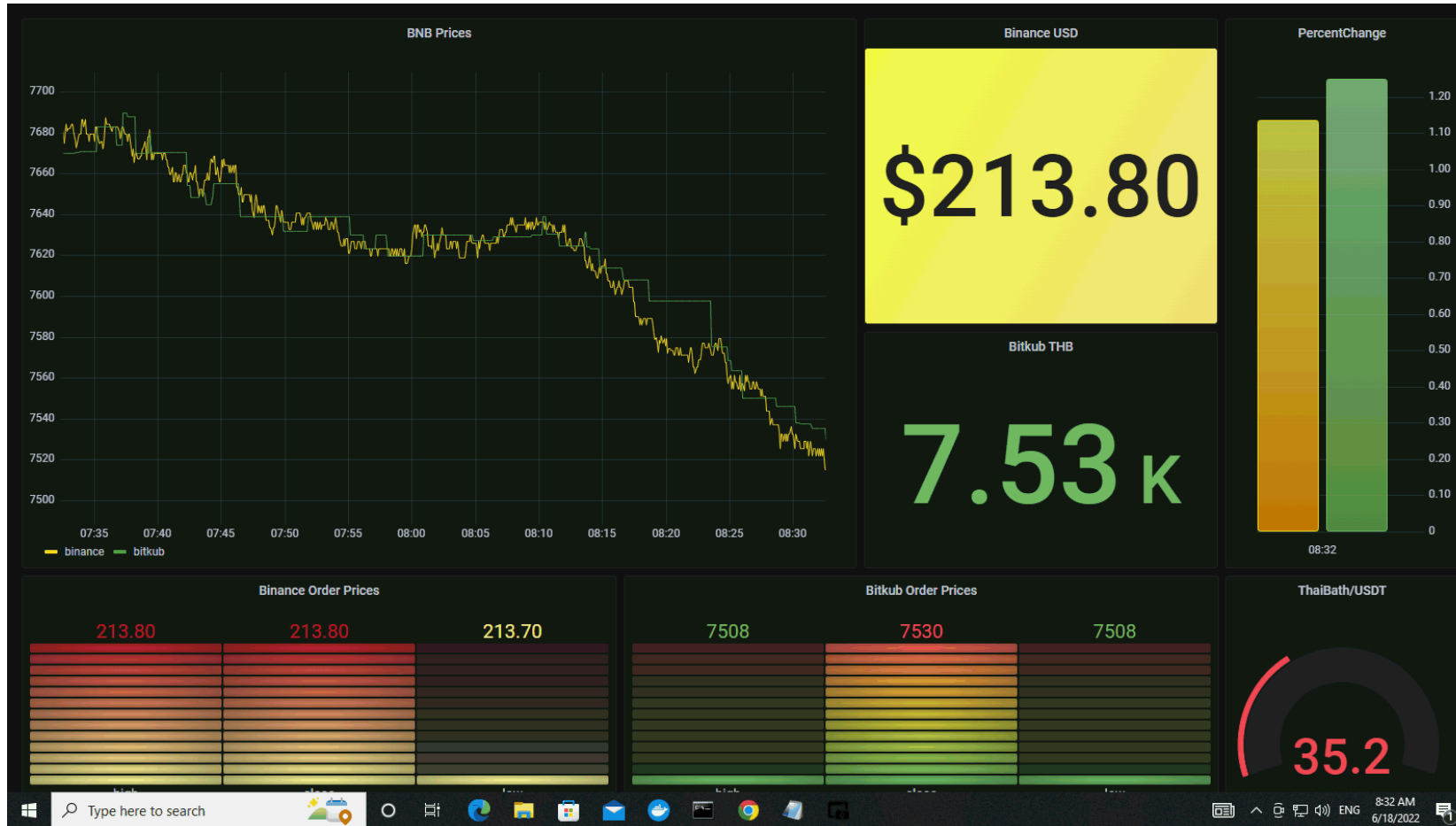
**ADWIN (online)**

**VS**



**LSTM (offline)**

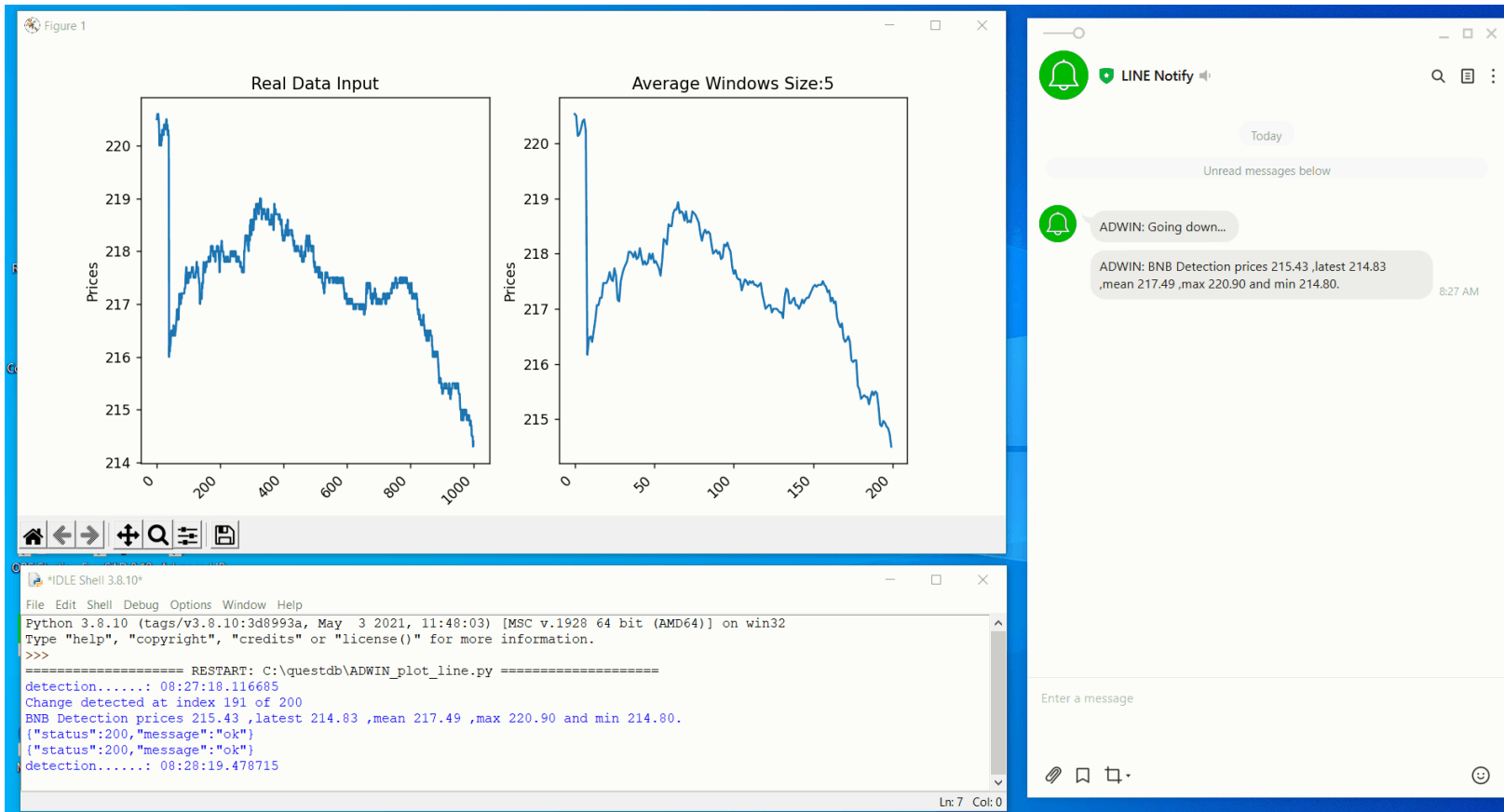
# Demo: Monitoring Module



## Module Concept

- Realtime prices comparing between Binance and BitKub.
- Realtime percentage changing in 24 hrs comparing between Binance and BitKub.
- Realtime Thai Bath per USDT.
- Realtime bidding prices.

# Demo: Analytics Module



## Module Concept

- Get data 1000 rows
- Average data on window size = 5
- Use ADWIN (ADaptive WINdowing) detect prices changed.
- If detection prices is upper with mean prices will alert "Going up".
- If detection prices is lower with mean prices will alert "Going down".
- Any message send to Line Notify.



# References

<https://techmark.pk/comparing-influxdb-timescaledb-and-questdb/>

<https://docs.confluent.io/platform/current/quickstart/ce-docker-quickstart.html>

<https://questdb.io/tutorial/2021/02/05/streaming-heart-rate-data-with-iot-core-and-questdb/#visualizing-data-with-grafana>

<https://github.com/UncleEngineer/BitkubAndBinance>

<https://github.com/Yitaek/kafka-crypto-questdb>

[https://scikit-multiflow.readthedocs.io/en/stable/api/generated/skmultiflow.drift\\_detection.ADWIN.html](https://scikit-multiflow.readthedocs.io/en/stable/api/generated/skmultiflow.drift_detection.ADWIN.html)



THANK YOU