Digital Research Alliance of Canada

Resource & Data Collection Workshop

Kristina Cormier

Computer Science, Okanagan College

Collaborations with UBCO, UFV, and Langara College
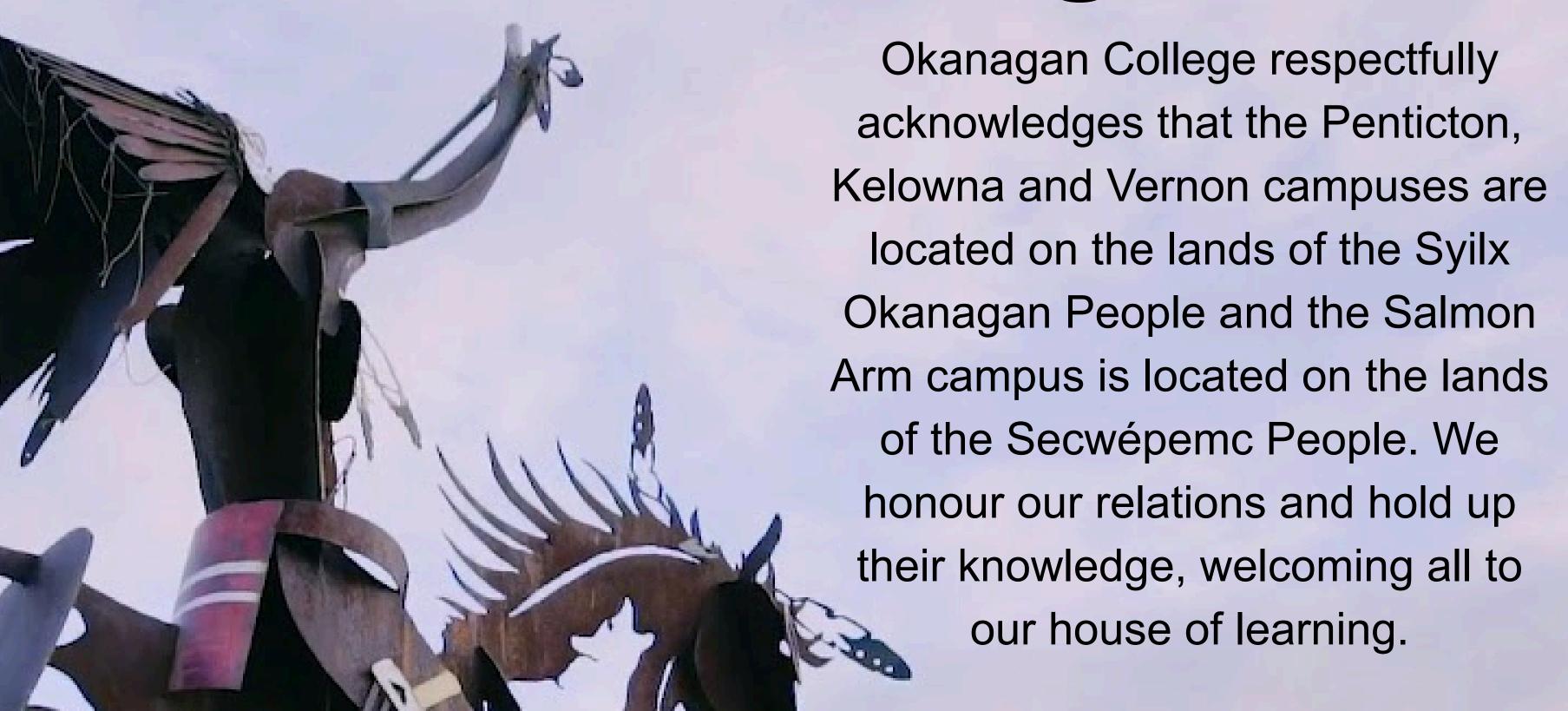
Supervisor: Dr. Youry Khmelevsky

September 24, 2025

IEEE — Okanagan College Student Branch

UFV

OC Okanagan COLLEGE — Computer Science Department

OC Langara. ʔə ƛ̓ xʷməθkʷəy̓əm | at Musqueam

UBC OKANAGAN

IEEE — Thompson - Okanagan Section

Land Acknowledgement

Okanagan College respectfully acknowledges that the Penticton, Kelowna and Vernon campuses are located on the lands of the Syilx Okanagan People and the Salmon Arm campus is located on the lands of the Secwépemc People. We honour our relations and hold up their knowledge, welcoming all to our house of learning.

Live Demonstration

https://www.alliancecan.ca/en

https://www.okanagan.bc.ca/science/computer-science/our-work

https://ccdb.alliancecan.ca/

Digital Research Alliance of Canada | **Alliance de recherche numérique** du Canada

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Account for Kristina Cormier (CCI: _____)

Account Renewal

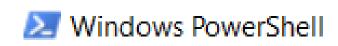Thank you for completing the renewal requirements. Your account has been renewed.

You may view or update your information at any time by visiting **the account renewal page**.

Active roles

CCRI: _____
Undergraduate Student, Okanagan College, Computer Science, renewed within the last 2 months
last renewed on 2025-08-18 12:50:31 EDT -0400
Sponsored by _____ Youry Khmelevsky: Faculty, Computer Science, Okanagan College

Windows PowerShell

Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\kusha> ssh -J <username>@fir.alliancecan.ca -L 15432:cedar-pgsql-vm:5432 <username>@cedar.computecanada.ca

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1. Sign into DRAC

2. SSH using Powershell / Terminal

3. Approve Multifactor Authentication (MFA)
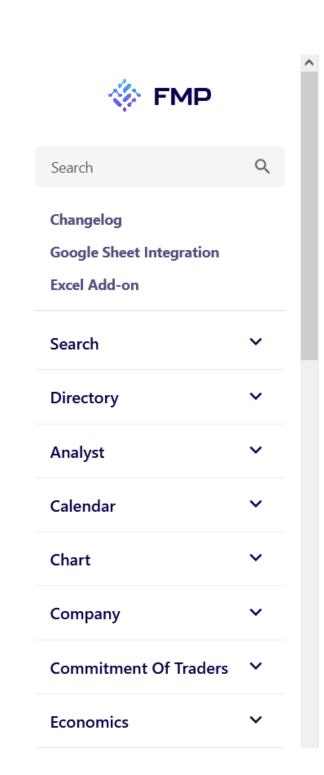
Approve sign-in request

Open your duo mobile application and approve the
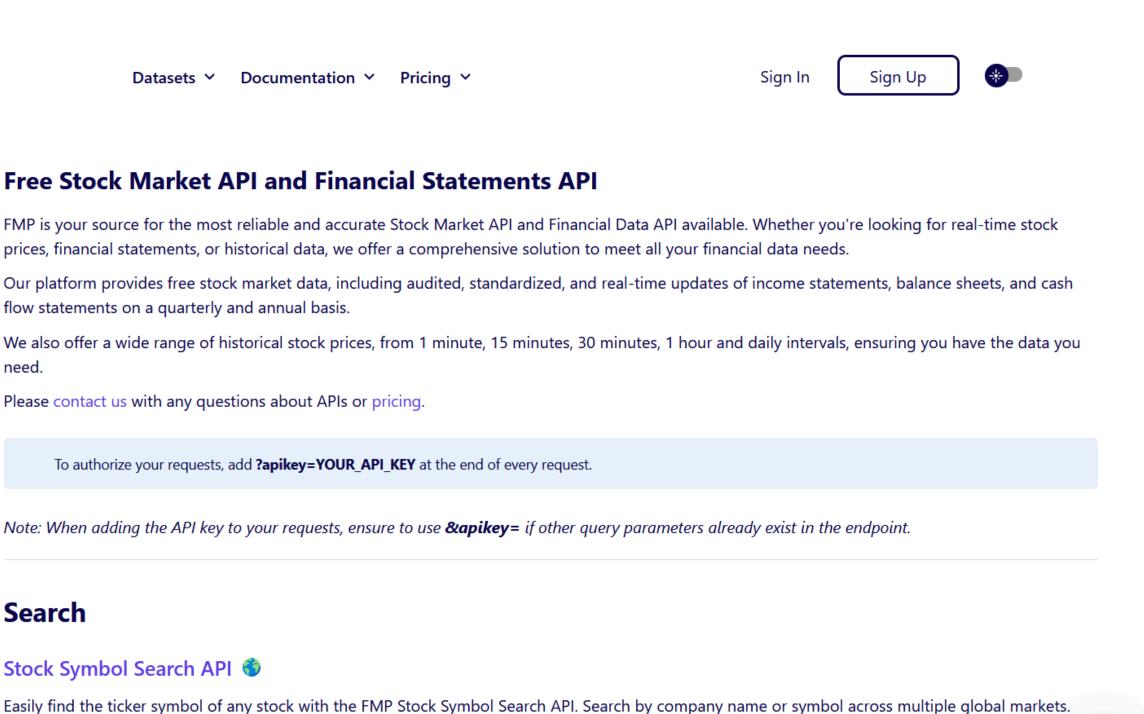login request to continue.

Problems signing in? **Sign in a different way.**

A push notification is a message that appears on
your phone's home screen, even if the application
isn't open. Once the notification has been received,
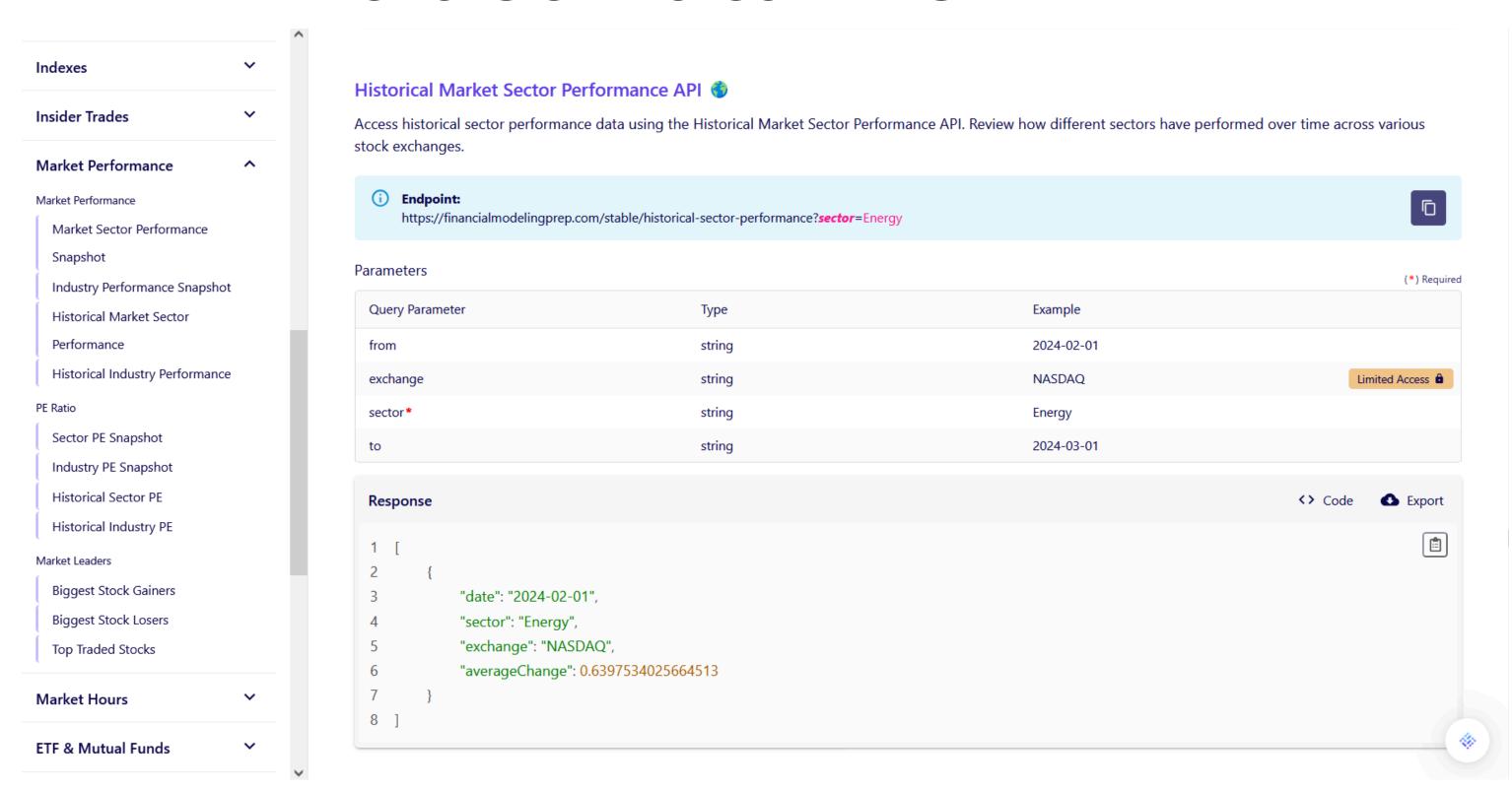click accept to automatically continue with the login.

If you have not enabled this functionality, please
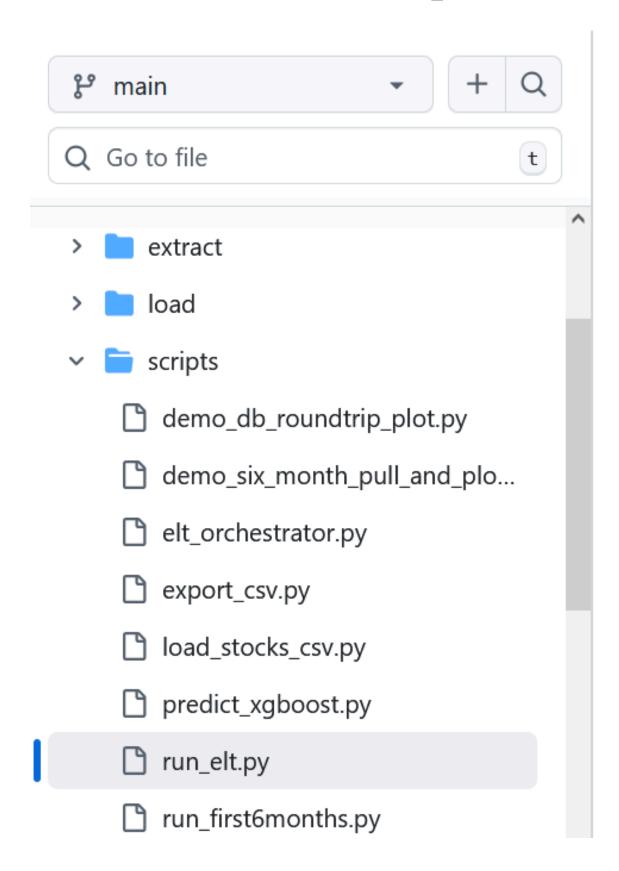contact our **support team**.

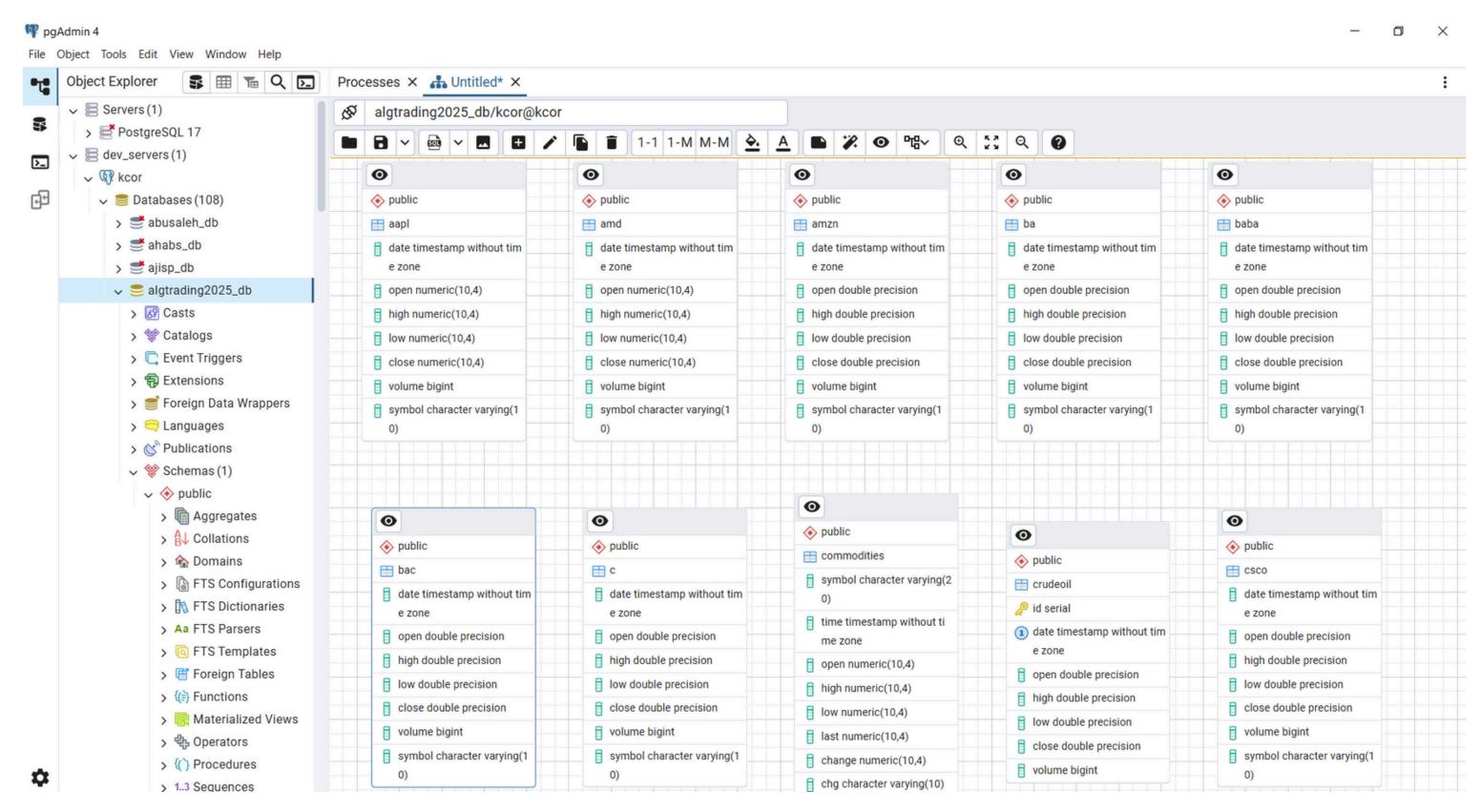# Financial Modeling Prep (FMP) for Data

Extract Data From FMP
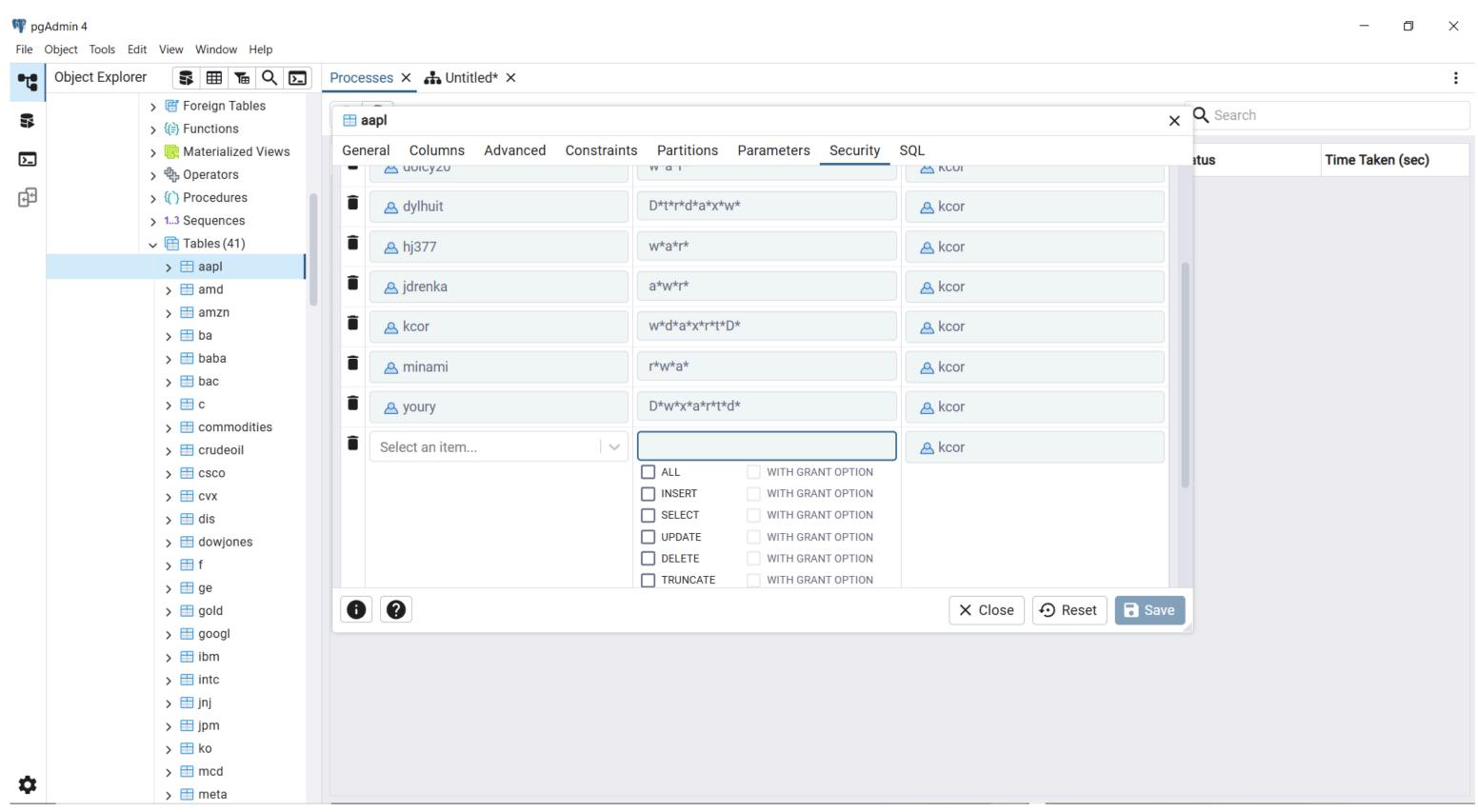
Use Scripts to Extract Data as CSV File

main

Go to file

> extract
> load
> scripts
    demo_db_roundtrip_plot.py
    demo_six_month_pull_and_plo...
    elt_orchestrator.py
    export_csv.py
    load_stocks_csv.py
    predict_xgboost.py
    run_elt.py
    run_first6months.py

DylHuitOC Added ELT process for data collection, meant to run historical data c...

Code   Blame

```python
1    """
2    ELT Process Runner
3    Simple script to run different ELT operations
4    """
5
6    import sys
7    import os
8    sys.path.append(os.path.dirname(os.path.dirname(os.path.abspath(__file__))))
9    import argparse
10   from datetime import datetime, timedelta
11
12   from elt_orchestrator import ELTOrchestrator
13   from extract.market_data_extractor import MarketDataExtractor
14   from load.csv_data_warehouse_loader import CSVDataWarehouseLoader
15   from transform.raw_to_analytics_transformer import RawToAnalyticsTransformer
16   from quality.data_quality_checker import DataQualityChecker
```
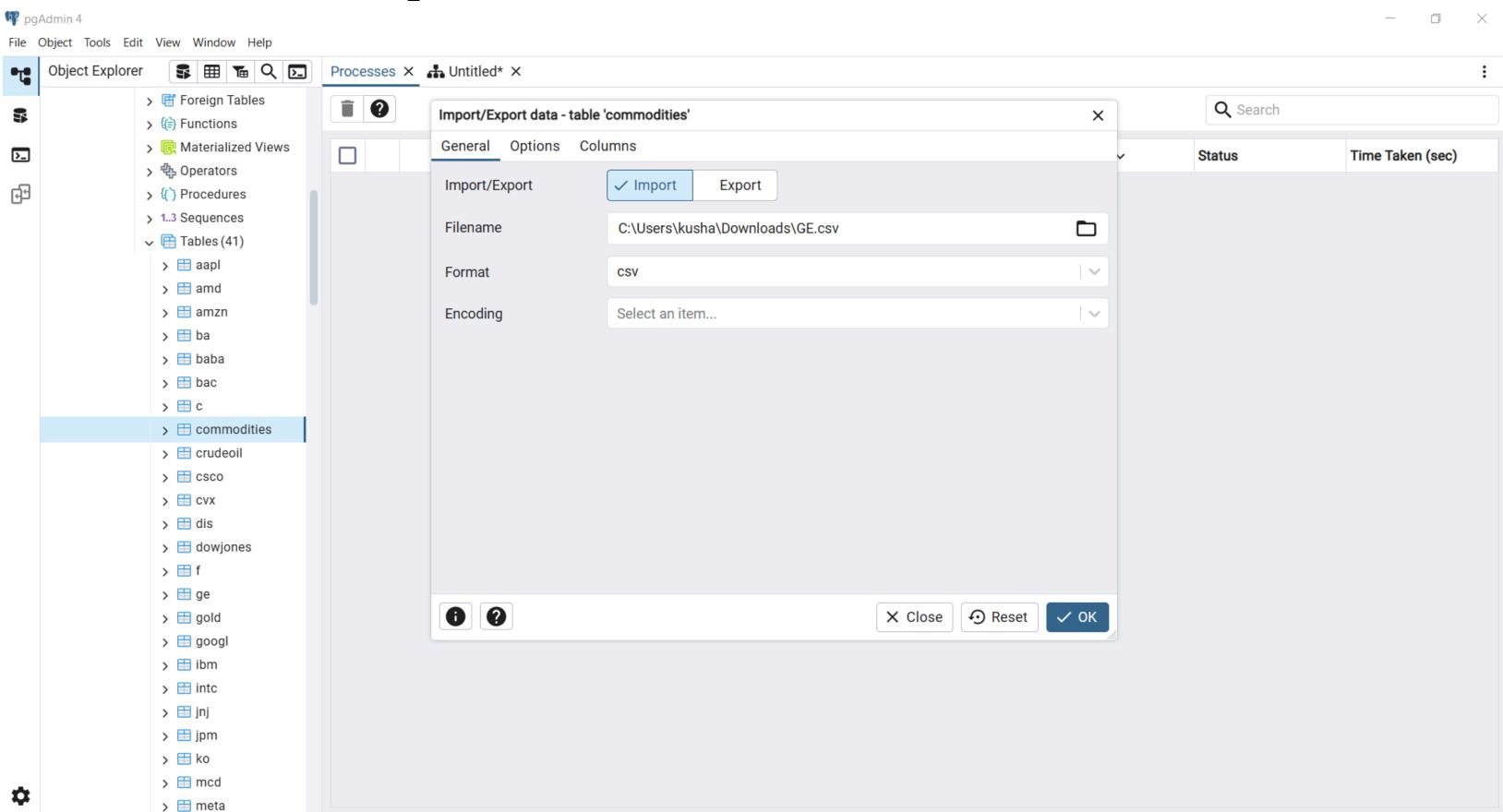
pgAdmin

Management Tools for PostgreSQL
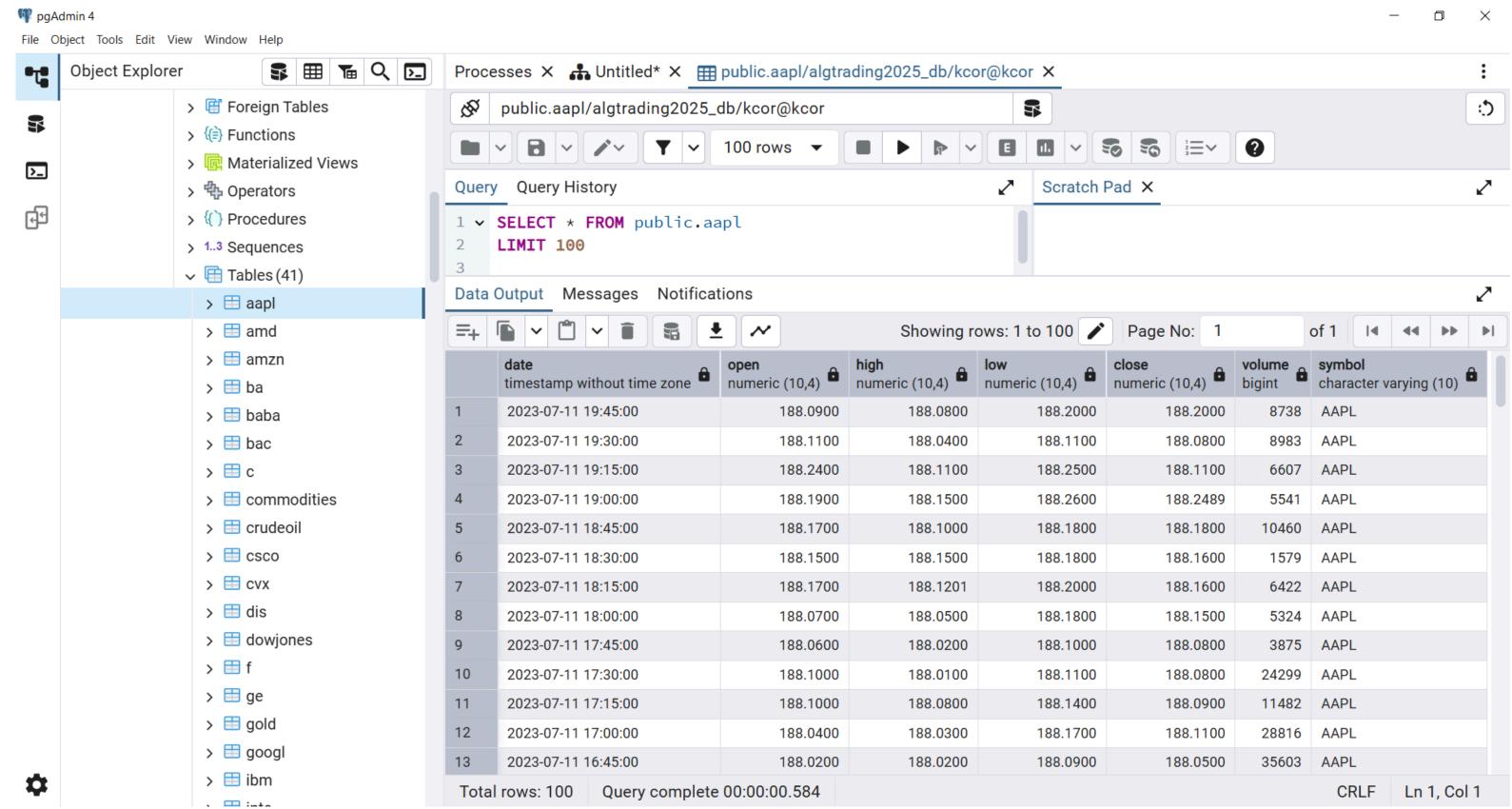
Entity Relationship Diagram (ERD)

Permissions (Database & Tables)

Import CSV into Table

Verify No Missing Values for All Data

Conclusion

- **About DRAC**
- **DRAC Services**
  - Research Data Management (RDM)
  - Advanced Research Computing (ARC)
    - Create& Manage CCDB account
- **Opportunities**
  - DRI EDIA Champions Pilot Program
  - Alliance Cloud Connect Project (ACCP)
- **Fir and Cedar PostgreSQL Access Guide**
- **SSH tunnel**
- **Collect & Import data**

References

"Alliance," Digital Research Alliance of Canada, accessed Sep. 25, 2025. [Online]. Available: https://www.alliancecan.ca/en

"CCDB Portal," Digital Research Alliance of Canada, accessed Sep. 25, 2025. [Online]. Available: https://ccdb.alliancecan.ca/

"Our Work," Okanagan College – Computer Science, accessed Sep. 25, 2025. [Online]. Available: https://www.okanagan.bc.ca/science/computer-science/our-work

pgAdmin Development Team, "pgAdmin," accessed Sep. 25, 2025. [Online]. Available: https://www.pgadmin.org

Thank You!

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