```
# Install Required Packages of Dune and Mongo DB

!pip install pymongo pandas
! pip install dune-client
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Requirement already satisfied: pymongo in /usr/local/lib/python3.10/dist-packages (4.10.1)
Requirement already satisfied: pandas in /usr/local/lib/python3.10/dist-packages (2.2.2)
Requirement already satisfied: dnspython<3.0.0,>=1.16.0 in /usr/local/lib/python3.10/dist-packages (from pymongo) (2.7.0)
Requirement already satisfied: numpy>=1.22.4 in /usr/local/lib/python3.10/dist-packages (from pandas) (1.26.4)
Requirement already satisfied: python-dateutil>=2.8.2 in /usr/local/lib/python3.10/dist-packages (from pandas) (2.8.2)
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Requirement already satisfied: six>=1.5 in /usr/local/lib/python3.10/dist-packages (from python-dateutil>=2.8.2->pandas) (1.16.0)
Requirement already satisfied: dune-client in /usr/local/lib/python3.10/dist-packages (1.7.7)
Requirement already satisfied: aiohttp>=3.8.3 in /usr/local/lib/python3.10/dist-packages (from dune-client) (3.11.9)
Requirement already satisfied: dataclasses-json>=0.6.4 in /usr/local/lib/python3.10/dist-packages (from dune-client) (0.6.7)
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Requirement already satisfied: types-requests>=2.28.0 in /usr/local/lib/python3.10/dist-packages (from dune-client) (2.32.0.20241016)
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Requirement already satisfied: mypy-extensions>=0.3.0 in /usr/local/lib/python3.10/dist-packages (from typing-inspect<1,>=0.4.0->datacla
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# Connect to Dune using API Key

from dune_client.client import DuneClient
import pandas as pd

# Connect to Dune using its API generate for the user and query id generated by Dune

dune = DuneClient("xQ0GH11bpKU53Qv3c7pa1LWVHZBprAWp")
query_id = 4385897

# Run and Pull query results

try:
    query_result = dune.get_latest_result(query_id)
    print("Dune Analytics query successful.")

# Extract the rows from the query data and convert to Pandas Data Frame named bonk

    data = query_result.get_rows()
    if data:
        bonk = pd.DataFrame(data)
        print("DataFrame created successfully.")
        print(bonk.head())
    else:
        print("No rows found in the query result.")
except Exception as e:
    print(f"Error fetching data from Dune: {e}")
```

```
Dune Analytics query successful.
DataFrame created successfully.
   amount_usd block_month  block_slot                 block_time blockchain  \
0    2.659123  2024-11-01  304132892  2024-11-28 12:42:00.000 UTC     solana
1    3.039952  2024-11-01  304133841  2024-11-28 12:48:52.000 UTC     solana
```

```
 2   3.088203  2024-11-01   304132887  2024-11-28 12:41:59.000 UTC      solana
 3   2.522494  2024-11-01   304133224  2024-11-28 12:44:25.000 UTC      solana
 4   3.178068  2024-11-01   304133200  2024-11-28 12:44:15.000 UTC      solana

    fee_tier   fee_usd  inner_instruction_index  outer_instruction_index  \
 0      0.01  0.026591                        4                        3
 1      0.01  0.030400                        2                        4
 2      0.01  0.030882                        4                        3
 3      0.01  0.025225                        4                        3
 4      0.01  0.031781                        2                        4

      project  ...  token_pair  token_sold_amount  token_sold_amount_raw  \
 0  pumpdotfun  ...    SOL-BONK           0.011272               11271767
 1  pumpdotfun  ...    SOL-BONK      164515.679497           164515679497
 2  pumpdotfun  ...    SOL-BONK           0.013091               13090598
 3  pumpdotfun  ...    SOL-BONK           0.010693               10692613
 4  pumpdotfun  ...    SOL-BONK      215220.105751           215220105751

                         token_sold_mint_address token_sold_symbol  \
 0   So11111111111111111111111111111111111111112               SOL
 1   8gwQ7i53XdWqeqsQYeXSmxbaMhwvpyqnvXCuP3vupump              BONK
 2   So11111111111111111111111111111111111111112               SOL
 3   So11111111111111111111111111111111111111112               SOL
 4   8gwQ7i53XdWqeqsQYeXSmxbaMhwvpyqnvXCuP3vupump              BONK

                         token_sold_vault trade_source  \
 0   Fodkz88ABUcyoFAi3LDPYY9TyR4Q8DyVLNaSiKfftuqC       direct
 1   FWa7Pvh4nS9HQJTNpJLy5hkEYJhgLyApkiqqH3zsp7i1       direct
 2   Fodkz88ABUcyoFAi3LDPYY9TyR4Q8DyVLNaSiKfftuqC       direct
 3   Fodkz88ABUcyoFAi3LDPYY9TyR4Q8DyVLNaSiKfftuqC       direct
 4   FWa7Pvh4nS9HQJTNpJLy5hkEYJhgLyApkiqqH3zsp7i1       direct

                         trader_id  \
 0   d5A6o2eWaEusWesLBnDG8Nmi8PFvdQGPdrxy5UmFDog
 1   5CmGkNjuCr8R99VLGepHcvW9uGvbYXwYQVpfwj1S59wr
 2   d5A6o2eWaEusWesLBnDG8Nmi8PFvdQGPdrxy5UmFDog
 3   d5A6o2eWaEusWesLBnDG8Nmi8PFvdQGPdrxy5UmFDog
 4   5CmGkNjuCr8R99VLGepHcvW9uGvbYXwYQVpfwj1S59wr

                         tx_id version
 0   Tr2sNPsWjeT5Vi3N8mJkM6d4cr7xbU6CdZKAcU2Wa6s6Zw...        1
 1   62hDMCQ9PkT2y38W5zUnFRy2cqF7zTVyBAf6FXkH6Xd9f3...        1
 2   2hqqhosEgUwx6ankTff3KUhKLibM6QsF1BWsobUR6kN2Kg...        1
 3   4sXHrkmruREtNCciWfSZMEGhyqsKyEtPwT22HrBActYvBw...        1
 4   5FiwBSGKp2p8Jy2wZLdwajHMCo7teMQkD6EUc4w5MzxSUZ...        1

[5 rows x 27 columns]
```

```python
# Connect to Mongo DB using URL End point, Database name, password and collection name created in Mongo DB

from pymongo import MongoClient

# Mongo DB User Connection Details

client = MongoClient("mongodb+srv://aditag96:agarwal1@edmminiproject3.ji0w3.mongodb.net/")
db = client["bonk"]
collection = db["trades-28-nov"]

# Now transfer and push above created dataframe bonk to Mongo DB

if not bonk.empty:
    try:
        json_data = bonk.to_dict(orient="records")  # Convert bonk data frame into dictionaries
        result = collection.insert_many(json_data)

        print(f"Inserted {len(result.inserted_ids)} records into MongoDB.") # Check number of rows copied or not
    except Exception as e:
        print(f"An error occurred while inserting data into MongoDB: {e}")
else:
    print("No data to transfer to MongoDB.")
```

```
Inserted 2456 records into MongoDB.
```