In [1]:
```
#pip install psycopg2-binary sqlalchemy
```

```
Collecting psycopg2-binary
  Downloading psycopg2_binary-2.9.11-cp313-cp313-win_amd64.whl.metadata (5.1 kB)
Collecting sqlalchemy
  Downloading sqlalchemy-2.0.44-cp313-cp313-win_amd64.whl.metadata (9.8 kB)
Collecting greenlet>=1 (from sqlalchemy)
  Downloading greenlet-3.2.4-cp313-cp313-win_amd64.whl.metadata (4.2 kB)
Requirement already satisfied: typing-extensions>=4.6.0 in c:\users\marty\anaconda3
\envs\dse5002\lib\site-packages (from sqlalchemy) (4.15.0)
Downloading psycopg2_binary-2.9.11-cp313-cp313-win_amd64.whl (2.7 MB)
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   ---------------------------------------- 2.7/2.7 MB 4.7 MB/s  0:00:00
Downloading sqlalchemy-2.0.44-cp313-cp313-win_amd64.whl (2.1 MB)
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   ---------------------------------------- 2.1/2.1 MB 3.9 MB/s  0:00:00
Downloading greenlet-3.2.4-cp313-cp313-win_amd64.whl (299 kB)
Installing collected packages: psycopg2-binary, greenlet, sqlalchemy

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Successfully installed greenlet-3.2.4 psycopg2-binary-2.9.11 sqlalchemy-2.0.44
Note: you may need to restart the kernel to use updated packages.
```

In [1]:
```
import psycopg2
from sqlalchemy import create_engine # If using SQLAlchemy

# Connection parameters
db_name = "chinook"  # Replace with your database name (created in pgAdmin 4)
user = "heyste"          # Replace with your PostgreSQL username (e.g., 'postgres')
password = "ab"      # Replace with your PostgreSQL password
host = "localhost"              # Usually 'localhost' for a local installation
port = "5432"                   # Default PostgreSQL port, verify in pgAdmin 4 if u
```

```
try:
    # Connect using psycopg2
    conn = psycopg2.connect(dbname=db_name, user=user, password=password, host=host
    cursor = conn.cursor()
    print("Successfully connected to PostgreSQL!")

    # Example: Execute a query
    cursor.execute("SELECT version();")
    db_version = cursor.fetchone()
    print(f"PostgreSQL version: {db_version[0]}")

    # If using SQLAlchemy (optional)
    engine = create_engine(f'postgresql://{user}:{password}@{host}:{port}/{db_name}
    print("SQLAlchemy engine created successfully.")

except psycopg2.Error as e:
    print(f"Error connecting to PostgreSQL: {e}")

finally:
    # Close the connection when done
    if 'conn' in locals() and conn:
        cursor.close()
        conn.close()
        print("PostgreSQL connection closed.")
```

```
Successfully connected to PostgreSQL!
PostgreSQL version: PostgreSQL 18.0 on x86_64-windows, compiled by msvc-19.44.35217,
64-bit
SQLAlchemy engine created successfully.
PostgreSQL connection closed.
```

In [ ]: