COMP3311 Week 8

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Adapted from Kyu-Sang Kim

Announcements

- Quiz 5 due Friday 3 November @11:59pm AEST

- Assignment 2 will be released soon, still in progress
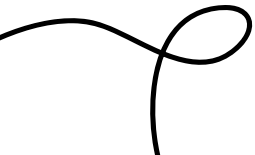 - Due date will be adjusted accordingly

Learning Objectives

01 → **Psycopg2**

02 → **Tutorial Questions!**

01

Psycopg2

01 → Psycopg2

- A Python module that gives us a way to **connect Python to a SQLite or PostgreSQL database**
- Allows us to:
  - write a query as a string in Python
  - send to database
  - retrieve results as a list of tuples (among others)
  - handle and manipulate those results in Python
- How familiar are we all with Python?

01 → Psycopg2

- Steps to using Psycopg2:
  1. Connect to a database. Return a **connection** object used to access the DB.
     - `conn = psycopg2.connect(`*DB_connection_string*`)`
  2. Create a **cursor** conn to perform queries/updates on DB.
     - `cur = conn.cursor()`
  3. Make necessary operations on the cursor e.g.
     - `cur.execute(`*SQL_statement*`, `*Values*`)`
     - `list = cur.fetchall()`
     - `tup = cur.fetchone()`
     - `tup = cur.fetchmany(`*nTuples*`)`
  4. Commit changes made to DB
     - `conn.commit()`
  5. Close the connection to the database
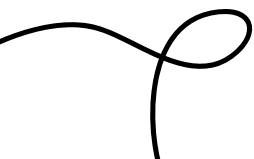   - `conn.close()`

02

Tutorial Questions

02 → **Tutorial Questions**

- Not many questions this week, so we should be able to get through most of them! :D

1. `~` : Case-sensitive, compares two statements, returns true if the first string is contained in the second

2. `~*` : Case-insensitive, compares two statements, returns true if the first string is contained in the second

3. `!~` : Case-sensitive, compares two statements, returns false if the first string is contained in the second

4. `!~*` : Case-insensitive, compares two statements, return false if the first string is contained in the second