**Functions**

1. **SQL Advanced Basics**
2. Connecting to a database using [psycopg2](http://initd.org/psycopg/)

import psycopg2

conn = psycopg2.connect("dbname=postgres user=postgres")

cur = conn.cursor()

import psycopg2

conn = psycopg2.connect("dbname=dq user=dq")

cur = conn.cursor()

print(cur)

conn.close()

1. Creating a table

import psycopg2

conn = psycopg2.connect("dbname = dq user=dq")

cur = conn.cursor()

query = '''

create table notes(

id integer PRIMARY KEY,

body text,

title text);

'''

cur.execute(query)

conn.close()

1. SQL transaction in PostgreSQL

import psycopg2

conn = psycopg2.connect("dbname = dq user=dq")

cur = conn.cursor()

query = '''

create table notes(

id integer PRIMARY KEY,

body text,

title text);

'''

cur.execute(query)

conn.commit()

conn.close()

WITH AUTOCOMMIT

conn = psycopg2.connect("dbname=dq user=dq")

conn.autocommit = True

cur = conn.cursor()

cur.execute("CREATE TABLE facts(id integer PRIMARY KEY, country text, value integer)")

conn.close()

1. Executing queries

conn = psycopg2.connect("dbname=dq user=dq")

cur = conn.cursor()

cur.execute("INSERT INTO notes VALUES (1, 'Do more missions on Dataquest.', 'Dataquest reminder');")

cur.execute('select \* from notes;')

print(cur.fetchall())

conn.close()

1. Creating a database

import psycopg2

conn = psycopg2.connect("dbname=dq user=dq")

conn.autocommit = True

cur = conn.cursor()

cur.execute('CREATE DATABASE income OWNER dq;')

conn.close()

1. Deleting a database

import psycopg2

conn = psycopg2.connect("dbname=dq user=dq")

conn.autocommit = True

cur = conn.cursor()

cur.execute('DROP DATABASE income;')

conn.close()