Overview

- [[Call Level Interfaces]] for dynamic SQL
- similar to [[JDBC]]

Example

Establish Connection

```
conn = psycopg2.connect(
    host="localhost", port="5432",
    database="db1234567", user=username,
    password=password)
```

Execute Statements
- Use local cursors

```
cur = conn.cursor()
cur.execute("INSERT INTO Students VALUES(...)")
```

Process Result Sets

```
cur.execute("SELECT SID, LName FROM Students")
students = cur.fetchall()
for row in students:
    print("SID = ", row[0], end = ',')
    print("Lname = ", row[1])
```

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Execute Prepared Statements

```
cur = conn.cursor()
sql = "INSERT INTO Students VALUES(%s, %s)"
for s in students:
    cur.execute(sql, (s.getID(),s.getName()))
conn.commit()
```

Execute Callable Statement
- Result set
- No output parameters

```
cur = conn.cursor()
cur.callproc("prepStudents", (2019, 2))
cur.fetchone()
```

Close Connection

```
cur.close()
conn.close()
```

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