

## C2

### Problem Statement:

Implement MySQL/Oracle database connectivity with Python/Java and perform CRUD operations.

Example code for Python (mysql-connector-python) and Java (JDBC).

### Code:

```
# C2: MySQL connectivity examples

# Python (mysql-connector-python)
import mysql.connector
cnx = mysql.connector.connect(user='root', password='pwd', host='127.0.0.1', database='testdb')
cursor = cnx.cursor()
cursor.execute("CREATE TABLE IF NOT EXISTS students (id INT PRIMARY KEY, name VARCHAR(100))")
cursor.execute("INSERT INTO students (id, name) VALUES (%s, %s)", (1, 'Amit'))
cnx.commit()
cursor.execute("SELECT * FROM students")
for row in cursor.fetchall():
    print(row)
cursor.close()
cnx.close()

# Java (JDBC)
import java.sql.*;
Class.forName("com.mysql.cj.jdbc.Driver");
Connection conn = DriverManager.getConnection("jdbc:mysql://localhost:3306/testdb", "root", "pwd");
Statement st = conn.createStatement();
st.executeUpdate("CREATE TABLE IF NOT EXISTS demo (id INT PRIMARY KEY, name VARCHAR(100))");
st.executeUpdate("INSERT INTO demo (id, name) VALUES (1, 'Amit')");
ResultSet rs = st.executeQuery("SELECT * FROM demo");
while(rs.next()) System.out.println(rs.getInt(1)+", "+rs.getString(2));
conn.close();
```