

## 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();
```