

Assignment No. C2

Title :- MySQL Java Connectivity

Problem Statement :- To study and implement database connectivity & perform operations on

Objective: To,

- 1) Understand the concept of database
- 2) Understand the concept of "JDBC"
- 3) Understand the database operations.

Outcome: Students will be able to establish connectivity between Java and MySQL.

Software & Hardware Requirements:
MySQL, JAVA, 64 bit OS, 1 GB RAM.

Theory:

MySQL is with the most popular open source relational SQL database management system.

MySQL is one of the best RDBMS being used for developing various user based software applications.

MySQL is developed, marketed & supported by MySQL AB, which is a Swedish company.

Connectivity to Database -

```
class.forName("com.mysql.jdbc.Driver");  
Connection con = DriverManager.getConnection(  
    "jdbc:mysql://localhost:3306/c2",  
    "root", "mysql");  
autoconnect = true & use ssl = false
```

Insert into Database:

```
query = String.format("insert into employee values  
('%d', '%s', '%s', '%s', '%d')", id, name, city, country,  
    salary);
```

Delete From Database:

```
query = String.format("delete from employee  
where '%s'", cond);  
st.executeUpdate(query);
```

Update into database:

```
query = String.format("update employee set '%s' where  
'%s' = '%s'", upd, cond);  
st.executeUpdate(query);
```

Test

Cases:

- 1) Insert
- 2) Find
- 3) Update
- 4) Delete

1) i/p : 1

o/p : 1, Ayush, Pune, India, 50000

i/p : 1

o/p : 2, Mona, Delhi, India, 65000

i/p : 1

o/p : 3, William, London, UK, 80000

i/p : 4, Anna, Vegas, USA, 78000

o/p : 4, Anna, Vegas, USA, 78000

2) i/p : 2

o/p : All entries

2) Filter

i/p : 1

id	Name	City	Country	Salary
1	Ayush	Pune	India	50000
2	Mona	Delhi	India	65000
3	William	London	UK	80000
4	Anna	Vegas	US	78000

i/p : 2

o/p : Enter condition : id = 2

id	Name	City	Country	Salary
2	Mona	Delhi	India	65000

3) i/p : 3

o/p : Enter condition : id = 4

Enter updation : Salary = 90000

i/p : 2

o/p : Entries Updated

3)

i/p: 4

o/p: Enter

Condition: id < 4

i/p: 2

o/p: Table with 3 entries

• Result: All the test cases yielded the result PASS

• Conclusion:

Hence we successfully implemented MySQL-Test Connectivity