



# DBMS

**LAB GROUP - 3**

**Team ID – 305**

**JAVA PROGRAM**

---

## **CONNECTION**

```
String jdbcUrl = "jdbc:postgresql://localhost:5432/postgres";
String userName = "postgres";
String password = "tiger";

try {
    connection = DriverManager.getConnection(jdbcUrl, userName, password);
    System.out.println("Connected to the PostgreSQL server successfully.");
} catch (SQLException e) {
    System.out.println("Error");
    System.out.println(e.getMessage());
}
```

---

```
Connected to the PostgreSQL server successfully.
```

## **CHANGE SCHEMA**

```
Statement SMA = connection.createStatement();
String setSchemaQuery = "SET search_path TO SRO";
SMA.execute(setSchemaQuery);
```

## SELECT STATEMENT

```
Statement statement = connection.createStatement();
String query="SELECT * FROM Employee";
ResultSet resultset=(statement).executeQuery(query);
while(resultset.next()) {
    int id=resultset.getInt("eid");
    Date hdate = resultset.getDate("hire_date");
    System.out.println("| ID IS : " + id + " | hire_date : " + hdate + " |");
}
```

```
| ID IS : 1001 | hire_date : 2015-07-01 |
| ID IS : 1002 | hire_date : 2016-02-15 |
| ID IS : 1003 | hire_date : 2017-05-10 |
| ID IS : 1004 | hire_date : 2018-08-20 |
| ID IS : 1005 | hire_date : 2019-11-25 |
| ID IS : 1006 | hire_date : 2020-04-02 |
| ID IS : 1007 | hire_date : 2021-01-10 |
| ID IS : 1008 | hire_date : 2022-03-15 |
| ID IS : 1009 | hire_date : 2015-09-05 |
| ID IS : 1010 | hire_date : 2016-06-12 |
| ID IS : 1011 | hire_date : 2017-08-20 |
| ID IS : 1012 | hire_date : 2018-10-30 |
| ID IS : 1013 | hire_date : 2019-12-05 |
| ID IS : 1014 | hire_date : 2020-03-20 |
| ID IS : 1015 | hire_date : 2021-06-15 |
| ID IS : 1016 | hire_date : 2022-01-01 |
| ID IS : 1017 | hire_date : 2022-01-15 |
| ID IS : 1018 | hire_date : 2022-02-01 |
| ID IS : 1019 | hire_date : 2022-02-15 |
| ID IS : 1020 | hire_date : 2022-03-01 |
| ID IS : 1021 | hire_date : 2022-03-15 |
| ID IS : 1022 | hire_date : 2022-04-01 |
| ID IS : 1023 | hire_date : 2022-04-15 |
| ID IS : 1024 | hire_date : 2022-05-01 |
| ID IS : 1025 | hire_date : 2022-05-15 |
| ID IS : 1026 | hire_date : 2022-06-01 |
| ID IS : 1027 | hire_date : 2022-06-15 |
| ID IS : 1028 | hire_date : 2022-07-01 |
| ID IS : 1029 | hire_date : 2022-07-15 |
| ID IS : 1030 | hire_date : 2022-08-01 |
```

## INSERT STATEMENT

```
Statement statement1 = connection.createStatement();
String query1 = String.format("INSERT INTO Visitors (Branch_id, Date_of_visit,"
    + " Visitor_name, Contact_no, Organization, Purpose) "
    + "VALUES (05, '2024-01-10', 'Naru Smith', 1234567890, "
    + "'SpaceTech Inc.', 'Meeting with Department Heads')");
//here number of rows are effected...
int rowsAffected1 = statement1.executeUpdate(query1);
if(rowsAffected1>0) {
    System.out.println("Data Inserted Successfully...");
}else {
    System.out.println("Data Not Inserted");
}
```

Data Inserted Successfully...

## **UPDATE STATEMENT**

```
Statement statement2 = connection.createStatement();
String query2 = String.format("UPDATE Student_Applicants SET cpi = 7.5 '
    + \"WHERE student_id = 2202\"");
int rowAffected2 = statement2.executeUpdate(query2);
if(rowAffected2>0) {
    System.out.println("Data is Updated");
}else {
    System.out.println("Data is Not Updated");
}
```

Data is Updated

## **DELETE STATEMENT**

```
Statement statement3 = connection.createStatement();
String query3 = String.format("DELETE FROM Emp_Email "
    + \"WHERE Eid=1001 AND Email='vivek1490@gmail.com'");
int rowAffected3 = statement3.executeUpdate(query3);
if(rowAffected3>0) {
    System.out.println("Data is Deleted");
}else {
    System.out.println("Data is Not Deleted");
}
```

Data is Deleted