**Wrong Credentials:-**

**MySQL:-**

java.sql.SQLException: Access denied for user 'root'@'localhost' (using password: YES)

**Oracle:-**

java.sql.SQLException: Null user or password not supported in THIN driver

**Services Stopped Temporarily:-**

**MySQL:-**

java.sql.SQLException: Listener refused the connection with the following error:

ORA-12505, TNS:listener does not currently know of SID given in connect descriptor

The Connection descriptor used by the client was:

localhost:1521:xe

**Oracle:-**

com.mysql.jdbc.exceptions.jdbc4.CommunicationsException: Communications link failure

The last packet sent successfully to the server was 0 milliseconds ago. The driver has not received any packets from the server.

**If Correct:-**

**1. MySQL DB: Connection Established Successfully**

**2. Oracle DB: Connection Established Successfully**

**Oracle:-**

Table.java

Statement stmt = con.createStatement();

stmt.execute("create table students(rno number(3),name varchar2(10),marks number(3))");

java.sql.SQLException: ORA-**00955**: name is already used by an existing object

Msg: Same Table will not create again.

InsertRecord.java

Statement stmt = con.createStatement();

stmt.executeUpdate("insert into students values(4,'ddd',99)");

**"insert into students values(4,'ddd',99)"**

truncate table students;

Table truncated.

This table contains no data.

RetrieveData.java

Statement stmt = con.createStatement();

ResultSet rs = stmt.executeQuery("select \* from students");

ResultSetMetaData rm = rs.getMetaData();

**int** n = rm.getColumnCount();

**for** (**int** i = 1; i <= n; i++) {

System.*out*.println(rm.getColumnName(i) + "\t");

}

System.*out*.println();

**while** (rs.next()) {

System.*out*.println(rs.getInt(1) + "\t");

System.*out*.println(rs.getString(2) + "\t");

System.*out*.println(rs.getInt(3) + "\t");

System.*out*.println();

}

UpdateRecord.java

Statement stmt = con.createStatement(ResultSet.*TYPE\_SCROLL\_SENSITIVE*,ResultSet.*CONCUR\_UPDATABLE*);

ResultSet rs = stmt.executeQuery("select rno,name,marks from students");

rs.absolute(1);//row no

rs.updateInt(1, 5);

rs.updateString(2, "BHASKAR");

rs.updateInt(3, 93);

rs.updateRow();

System.*out*.println("One Record Updated Successfully");

**One Record Updated Successfully**

DeleteRecord.java

Statement stmt = con

.createStatement(ResultSet.*TYPE\_SCROLL\_SENSITIVE*,

ResultSet.*CONCUR\_UPDATABLE*);

ResultSet rs = stmt

.executeQuery("select rno,name,marks from studentss");

rs.absolute(1);

rs.deleteRow();

System.*out*.println("One Record Deleted Successfully");

**One Record Deleted Successfully**

BatchProcessing.java

Statement stmt = con.createStatement();

stmt.addBatch("insert into students values(6,'Ravi',77)");

stmt.addBatch("update students set marks=40 where rno=4");

stmt.addBatch("delete from students where rno=2");

stmt.executeBatch();

System.*out*.println("Batch Executed Successfully");

**Batch Executed Successfully**

InsertingRecords.java

Statement stmt = con

.createStatement(ResultSet.*TYPE\_SCROLL\_SENSITIVE*,

ResultSet.*CONCUR\_UPDATABLE*);

ResultSet rs = stmt

.executeQuery("select rno,name,marks from STUDENTSS");

rs.moveToInsertRow();

rs.updateInt(1, 11);

rs.updateString(2, "iii");

rs.updateInt(3, 555);

System.*out*.println("One record Inserted Successfully");

**One record Inserted Successfully**

MySQL\_Connection.java

**public** **static** **void** main(String[] args) **throws** ClassNotFoundException {

String databaseURL = "";

String user = "";

String password = "";

Connection conn = **null**;

**try** {

Class.*forName*("com.mysql.jdbc.Driver");

conn = DriverManager.*getConnection*(

"jdbc:mysql://localhost:3306/sonoo", "root", "");

**if** (conn != **null**) {

System.*out*

.println("MySQL DB: Connection Established Successfully");

}

} **catch** (SQLException ex) {

System.*out*

.println("An error occurred. Maybe user/password is invalid");

ex.printStackTrace();

} **finally** {

**if** (conn != **null**) {

**try** {

conn.close();

} **catch** (SQLException ex) {

ex.printStackTrace();

}// catch block

}// if block

}// finally

}// main()

**MySQL DB: Connection Established Successfully**

JdbcInsertDemo.java

**public** **static** **void** main(String[] args) {

String dbURL = "jdbc:mysql://localhost:3306/sonoo";

String username = "root";

String password = "";

**try** (Connection conn = DriverManager.*getConnection*(dbURL, username,

password)) {

String sql = "INSERT INTO Users (username, password, fullname, email) VALUES (?, ?, ?, ?)";

PreparedStatement statement = conn.prepareStatement(sql);

statement.setString(1, "bill");

statement.setString(2, "secretpass");

statement.setString(3, "Bill Gates");

statement.setString(4, "bill.gates@microsoft.com");

**int** rowsInserted = statement.executeUpdate();

**if** (rowsInserted > 0) {

System.*out*.println("A new user was inserted successfully!");

}// if condition

} **catch** (SQLException ex) {

ex.printStackTrace();

}

}//main()

com.mysql.jdbc.exceptions.jdbc4.MySQLSyntaxErrorException: Table 'sonoo.users' doesn't exist

**A new user was inserted successfully!**

JdbcSelectDemo.java

**public** **static** **void** main(String[] args) {

String dbURL = "jdbc:mysql://localhost:3306/sampledb";

String username = "root";

String password = "";

**try** (Connection conn = DriverManager.*getConnection*(dbURL, username, password)) {

String sql = "SELECT \* FROM Users";

Statement statement = conn.createStatement();

ResultSet result = statement.executeQuery(sql);

**int** count = 0;

**while** (result.next()){

String name = result.getString(2);

String pass = result.getString(3);

String fullname = result.getString("fullname");

String email = result.getString("email");

String output = "User #%d: %s - %s - %s - %s";

System.*out*.println(String.*format*(output, ++count, name, pass, fullname, email));

}

} **catch** (SQLException ex) {

ex.printStackTrace();

}

}

**public** **static** **void** main(String[] args) {

String dbURL = "jdbc:mysql://localhost:3306/sampledb";

String username = "root";

String password = "";

**try** (Connection conn = DriverManager.*getConnection*(dbURL, username, password)) {

String sql = "UPDATE Users SET password=?, fullname=?, email=? WHERE username=?";

PreparedStatement statement = conn.prepareStatement(sql);

statement.setString(1, "123456789");

statement.setString(2, "William Henry Bill Gates");

statement.setString(3, "bill@gatesfoundation.org");

statement.setString(4, "bill");

**int** rowsUpdated = statement.executeUpdate();

**if** (rowsUpdated > 0) {

System.*out*.println("An existing user was updated successfully!");

}

} **catch** (SQLException ex) {

ex.printStackTrace();

}

}

**An existing user was updated successfully!**

JdbcDeleteDemo.java

**public** **static** **void** main(String[] args) {

String dbURL = "jdbc:mysql://localhost:3306/sampledb";

String username = "root";

String password = "";

**try** (Connection conn = DriverManager.*getConnection*(dbURL, username,

password)) {

String sql = "DELETE FROM Users WHERE username=?";

PreparedStatement statement = conn.prepareStatement(sql);

statement.setString(1, "bill");

**int** rowsDeleted = statement.executeUpdate();

**if** (rowsDeleted > 0) {

System.*out*.println("A user was deleted successfully!");

}

} **catch** (SQLException ex) {

ex.printStackTrace();

}

}

**A user was deleted successfully!**

**Doubts:-**

SavePoint, WithoutSavePoint

**Qns?**

1. Service, PID, Ports = status?

2. CPU, Memory, Disk Usage and Processes?

3.