9 Dec 2022:

JDBC Steps:

1. Load the driver / register the driver with the Driver Manager.

Class.forName('com.jdbc.......Driver');

2. Get the connection by providing the url, username, password

Connection connection= DriverManager.getConnection(url, username, password)

3. Create a pipeline to send sql queries to database from java application

Statement statement= connection.createStatement(); // creates a pipeline

4. use statement object to add queries

example: insert an employee into db.

statement.execute(query)

5. close the connection

Problem Statement: Insert data into mysql db

**import** java.sql.Connection;

**import** java.sql.DriverManager;

**import** java.sql.ResultSet;

**import** java.sql.ResultSetMetaData;

**import** java.sql.SQLException;

**import** java.sql.Statement;

**public** **class** InsertData {

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

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

Connection connection=DriverManager.*getConnection*("jdbc:mysql://localhost:3306/EmployeesDB", "root", "ipl2021@dubai");

Statement statement = connection.createStatement();

// insert data into the database.

String query = "insert into customer values(14, 9014,29000,'anil')";

statement.execute(query);

}

Problem statement: retrieve the data from the db - table

**public** **class** InsertData {

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

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

Connection connection=DriverManager.*getConnection*("jdbc:mysql://localhost:3306/EmployeesDB", "root", "ipl2021@dubai");

Statement statement = connection.createStatement();

// get all the customers data from db

String query= "select \* from customer";

ResultSet resultset=statement.executeQuery(query);

System.***out***.println("Resultset"+ resultset);

**while**(resultset.next()) {

System.***out***.println(resultset.getInt("id")+ "\t"+ resultset.getInt("accountNumber")+"\t"+ resultset.getInt("balance")+"\t"+ resultset.getString("name"));

}

Problem Statement:

Get column names dynamically.

**package** com.firstapp;

**import** java.sql.Connection;

**import** java.sql.DriverManager;

**import** java.sql.ResultSet;

**import** java.sql.ResultSetMetaData;

**import** java.sql.SQLException;

**import** java.sql.Statement;

**public** **class** InsertData {

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

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

Connection connection=DriverManager.*getConnection*("jdbc:mysql://localhost:3306/EmployeesDB", "root", "ipl2021@dubai");

Statement statement = connection.createStatement();

// Get column names dynamically.

String query= "select \* from customer";

ResultSet resultset=statement.executeQuery(query);

ResultSetMetaData rsmd=resultset.getMetaData();

**int** count = rsmd.getColumnCount();

**int** i=1;

**while**( i <=count) {

System.***out***.println(rsmd.getColumnLabel(i));

}

}

}