**Java MySQL JDBC**

**Driver class:** The driver class for the MySQL database is **com.mysql.jdbc.Driver**.

**Connection URL:** The connection URL for the MySQL database is **jdbc:mysql://localhost:3306/sampledb** where **jdbc** is the **API**, **mysql** is the **database**, **localhost** is the **server name** on which MySQL is running, we may also use **IP address**, **3306** is the **port number** and **sampledb** is the **database name**.

**Username:** The default username for the MySQL database is **root**.

**Password:** Password is given at the time of installing the MySQL database.

DROP DATABASE IF EXISTS sampledb;

CREATE DATABASE sampledb;

USE sampledb;

DROP TABLE IF EXISTS emp;

CREATE TABLE emp(id int,name varchar(40),age int);

INSERT INTO emp(id, name, age)

VALUES(1, 'Alpha', 21);

INSERT INTO emp(id, name, age)

VALUES(2, 'Beta', 22);

INSERT INTO emp(id, name, age)

VALUES(3, 'Gamma', 23);

SELECT \* FROM emp;

**Java**

import java.sql.\*;

class MySQL {

public static void main(String args[]) {

try {

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

// Optional Check Connection // "root" is username, "My$ql@Server#5.7" is password

String dbURL = "jdbc:mysql://localhost/?user=root&password=My$ql@Server#5.7";

Connection conn = DriverManager.getConnection(dbURL);

if (conn != null) {

System.out.println("Connected");

}

conn.close();

// "sampledb" is database name, "root" is username, "My$ql@Server#5.7" is password

Connection con=DriverManager.getConnection("jdbc:mysql://localhost:3306/sampledb","root","My$ql@Server#5.7");

Statement stmt = con.createStatement();

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

int rowCount = 0;

while(rs.next()) {

rowCount++;

System.out.println(rs.getInt(1) + "\t"+ rs.getString(2) + "\t"+ rs.getString(3));

}

System.out.println("Number of Rows: " + rowCount);

con.close();

}

catch(Exception e) {

System.out.println(e);

}

}

}

The above example will fetch all the records of emp table.

**JDBC**

To connect java application with the MySQL database "mysql-connector-java-5.1.37-bin.jar" file is required to be loaded.

**Two ways to load the jar file:**

1. Download and Copy "mysql-connector-java-5.1.37-bin.jar" to the following directories (optional if the "mysql-connector-java-5.1.37-bin.jar" exists already):

C:\oraclexe\app\oracle\product\11.2.0\server\jdbc\lib

(Optional) C:\Program Files\Java\jre1.8.0\_51\lib\ext

1. Set classpath:

There are two ways to set the classpath:

* Temporary

Set classpath in Command Prompt:

set classpath=C:\Program Files (x86)\MySQL\MySQL Connector J\mysql-connector-java-5.1.37-bin.jar;.;

* Permanent

Add New Environment Variable:

Variable name: classpath

Variable value: As in the following case: C:\Program Files (x86)\MySQL\MySQL Connector J\mysql-connector-java-5.1.37-bin.jar;.;