Types of application:

1.One tier- desktop application

2.Two tier- static applications, static web page

3.Three tier- web application, client database

4.n Tier- Iot

JAR- java archieve (application)

WAR-web archieve (java files, html, servlet/jsp, css)

EAR- Enterprise archieve

EJB- Enterprise java bean or session (bean-simple java class with few properties+getter setter method

JDBC API is a Java API that can access any kind of tabular data, especially data stored in a Relational Database.

there are seven steps:

step 1: import java library

step 2: load the driver

2b.register driver

step 3: Establish connection

step 4: create statement

step 5: execute query

step 6: process result

step 7: close

java jdk with eclipse: windows=> preferences=>java=>installedJREs=javaSE 1.8

tomcat with eclipse: rightclick at program=>buildpath=>projectFacets=>tomcat

mysql with eclipse: rightclick at program=>buildpath=>add JARS=>add j connnector in system

**Showing data from db:**

import java.sql.\*;

class sample{pvsm(){

String query=”select\* from details”

Class.forName(“com.mysql.jdbc.Driver”);

Connection con=DriverManager.getConnection("jdbc:mysql://localhost:3306/userdetails","root","root");

Statement st=con.createStatement();

ResultSet rs=st.executeQuery(query);

rs.next(); //to print only single value in table

String name = rs.getString(“email”);

System.out.println(name);

while(rs.next()){ //to print all values in table

String name = rs.getString(“email”);

System.out.println(name); }

st.close();

con.close(); }}

**Insert values to db:**

package hello;

import java.sql.\*;

public class samplecalss2 {

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

int id=5;

int name=127;

String email="raj@gmail.com";

String query="INSERT INTO `userdetails`.`details` (`id`, `name`, `email`) VALUES ('"+id+"', '"+name+"', '"+email+"')";

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

Connection con=DriverManager.getConnection("jdbc:mysql://localhost:3306/userdetails","root","root");

Statement st=con.createStatement();

int rs= st.executeUpdate(query);

System.out.println(rs+"affected");

st.close();

con.close(); }}

**Using prepared statement:**

package hello;

import java.sql.\*;

public class samplclass {

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

int id=14,pwd=126;

String email="dfhjkdhf@gmail.com";

String query="insert into details values(?,?,?)";

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

Connection con=DriverManager.getConnection("jdbc:mysql://localhost:3306/userdetails","root","root");

PreparedStatement st= con.prepareStatement(query);

st.setInt(1,id);

st.setInt(2,pwd);

st.setString(3,email);

int rs= st.executeUpdate();

System.out.println(rs+"affected");

st.close();

con.close(); }}