JDBC Programs

1. 3A) Write a JDBC program to displays the details of employees (eno, ename, department, sal) whose department is “Computer Science”.
2. 5A) Write a java program to create Teacher table(TNo.TName, Sal, Desg) and insert a record in it.
3. 6A)Write a JDBC program to accept the details of customer (CID, CName, Address, Ph\_No) and store it into the database (Use PreparedStatement interface)
4. 9 A) Write a JDBC program to delete the records of employees whose names are starting with ‘A’ character.
5. 10 A) Write a JDBC program to count the number of records in table. (Without using standard method)
6. 11 A)Write a JDBC program to remove “percentage” column from student (rno, sname, percentage) table.
7. 13 A) Write a JDBC program to create a Mobile (Model\_No, Company\_Name, Price, Color) table and insert a record in it.
8. 1 4 B)Write a JDBC program in java to display details of Book\_Sales(SalesID, Date, Amount) of selected month in JTable. Book\_sales table is already created. (Use JCombo component for Month selection)

// Import required packages

import java.sql.\*;

import javax.swing.\*;

import java.awt.\*;

import java.awt.event.\*;

public class BookSales extends JFrame implements ActionListener {

// Declare components

JLabel monthLabel;

JComboBox monthComboBox;

JButton displayButton;

JTable salesTable;

JScrollPane scrollPane;

// Declare variables

String[] months = {"January", "February", "March", "April", "May", "June", "July", "August", "September", "October", "November", "December"};

String selectedMonth;

String url = "jdbc:mysql://localhost:3306/book\_sales";

String user = "root";

String password = "password";

Connection con;

Statement stmt;

ResultSet rs;

// Constructor

public BookSales() {

// Initialize components

monthLabel = new JLabel("Select Month:");

monthComboBox = new JComboBox(months);

displayButton = new JButton("Display");

salesTable = new JTable();

scrollPane = new JScrollPane(salesTable);

// Set layout

setLayout(new FlowLayout());

// Add components to frame

add(monthLabel);

add(monthComboBox);

add(displayButton);

add(scrollPane);

// Add action listener to button

displayButton.addActionListener(this);

// Set frame properties

setTitle("Book Sales");

setSize(500, 500);

setVisible(true);

setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

}

// Action performed method

public void actionPerformed(ActionEvent e) {

// Get selected month

selectedMonth = (String) monthComboBox.getSelectedItem();

try {

// Load driver class

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

// Establish connection

con = DriverManager.getConnection(url, user, password);

// Create statement

stmt = con.createStatement();

// Execute query

rs = stmt.executeQuery("SELECT \* FROM book\_sales WHERE MONTH(Date) = MONTH('" + selectedMonth + "-01')");

// Set table model

salesTable.setModel(DbUtils.resultSetToTableModel(rs));

} catch (Exception ex) {

System.out.println(ex);

} finally {

try {

// Close connection

rs.close();

stmt.close();

con.close();

} catch (Exception ex) {

System.out.println(ex);

}

}

}

// Main method

public static void main(String[] args) {

new BookSales();

}

}

1. 15 A) Write a JDBC program in java to update an address of given customer(cid,cname,address) and display updated details.
2. 17B. Write a JDBC application using swing for the following:
3. 21 A) Write a JDBC Program to display the names of Employees starting with ‘S’ character.
4. 23 B) Write a Java Program to Read, Update and Delete any record from “Elements” table. The table has following fields (Atomic\_weight , Name (primary key), Chemical\_Symbol). The input should be provided through Command Line Arguments along with the appropriate data. The operations are: R : Read, U: Update, D: Delete.
5. 22B) Write a java program to create a student table with field’s rno, name and per. Insert values in the table. Display all the details of the student on screen. (Use PreparedStatement Interface)

import java.sql.\*;

public class StudentTable {

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

// Create a connection to the database

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

// Create a PreparedStatement object

PreparedStatement stmt = con.prepareStatement("insert into student (rno, name, per) values (?, ?, ?)");

// Set the values of the parameters

stmt.setInt(1, 101);

stmt.setString(2, "John Doe");

stmt.setInt(3, 90);

// Execute the query

stmt.executeUpdate();

// Close the PreparedStatement object

stmt.close();

// Create a Statement object

Statement st = con.createStatement();

// Execute a query to display all the details of the student on screen

ResultSet rs = st.executeQuery("select \* from student");

// Print the results

while (rs.next()) {

System.out.println("Rno: " + rs.getInt(1));

System.out.println("Name: " + rs.getString(2));

System.out.println("Per: " + rs.getInt(3));

}

// Close the Statement object

st.close();

// Close the connection

con.close();

}

}

1. 24B) Write a java program to accept the details of college (CID, CName, Address, year) and store it into database (Use Swing and PreparedStatement interface)
2. 25BWrite a java program for implementation scrollable ResultSet. Consider Emp table (eno ename, sal) . Provide the operations moveFirst, moveNext, movePrevious and moveLast on the database.

import java.sql.\*;

public class ScrollableResultSet {

public static void main(String[] args) {

try {

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

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

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

ResultSet rs = stmt.executeQuery("SELECT \* FROM Emp");

// Move to the first record

rs.first();

System.out.println("First Record:");

System.out.println("Emp No: " + rs.getInt("eno"));

System.out.println("Emp Name: " + rs.getString("ename"));

System.out.println("Emp Salary: " + rs.getFloat("sal"));

// Move to the next record

rs.next();

System.out.println("\nNext Record:");

System.out.println("Emp No: " + rs.getInt("eno"));

System.out.println("Emp Name: " + rs.getString("ename"));

System.out.println("Emp Salary: " + rs.getFloat("sal"));

// Move to the previous record

rs.previous();

System.out.println("\nPrevious Record:");

System.out.println("Emp No: " + rs.getInt("eno"));

System.out.println("Emp Name: " + rs.getString("ename"));

System.out.println("Emp Salary: " + rs.getFloat("sal"));

// Move to the last record

rs.last();

System.out.println("\nLast Record:");

System.out.println("Emp No: " + rs.getInt("eno"));

System.out.println("Emp Name: " + rs.getString("ename"));

System.out.println("Emp Salary: " + rs.getFloat("sal"));

con.close();

} catch (Exception e) {

System.out.println(e);

}

}

}

1. 27A) Write a JDBC program to delete the details of given employee (ENo EName Salary). Accept employee ID through command line.

import java.sql.\*;

public class DeleteEmployee {

public static void main(String[] args) {

String url = "jdbc:mysql://localhost:3306/employee\_db";

String user = "root";

String password = "password";

int employeeID = Integer.parseInt(args[0]);

try (Connection con = DriverManager.getConnection(url, user, password);

Statement stmt = con.createStatement()) {

String sql = "DELETE FROM employee WHERE ENo = " + employeeID;

int rowsAffected = stmt.executeUpdate(sql);

if (rowsAffected > 0) {

System.out.println(rowsAffected + " row(s) deleted successfully.");

} else {

System.out.println("No rows deleted.");

}

} catch (SQLException e) {

System.out.println("Error: " + e.getMessage());

}

}

}

Multithreading

1. 2 A)Write a multithreading program in java to display all vowels from a given String. [15 M ]
2. 3 B) Write a java program to simulate traffic signal using multithreading.
3. 5 B)Write a MultiThreading program in java using Runnable interface to draw a horizontally rolling ball on an applet container.
4. 7 B)Write a Multithreading program in java for Racing Car. Folder
5. 8 A)Write a Multithreading program using Runnable interface to blink Text on the frame. [15 M]
6. 9 B)Write a Multithreading program in java using Runnable interface to display a bouncing ball on an Applet. (java ss folder)
7. 10 B) Write a Multithreading program in java for bouncing ball. For each bounce change the color of ball randomly.
8. 12 A)Write a Multithreading program in java to display the number’s between 1 to 100 continuously in a TextField by clicking on button.(use Runnable Interface).
9. 17A)Write a java program which will display name and priority of current thread. Change name of Thread to MyThread and priority to 2. Display the details of Thread. [15 M]
10. 18 A) Write a java program using multithreading to execute the threads sequentially. (Use Synchronized Method)
11. 19 B) Write a Multithreading program in java to convert smile face into the crying face after 5 seconds.

import java.awt.\*;

import java.applet.\*;

public class Slip19\_2 extends Applet implements Runnable {

Thread t;

int f;

public void init () {

t=new Thread (this);

t.start ();

f=0;

}

public void run () {

try {

if (f==0) {

t.sleep (5000);

f=1;

repaint ();

} else {

t.sleep (5000);

repaint ();

f=0;

}

} catch (Exception e) {

System.out.println (e);

}

run ();

}

public void paint (Graphics g) {

g.drawOval (100,100,100,100);

g.fillOval (120,125,20,20);

g.fillOval (160,125,20,20);

g.drawLine (150,125,150,150);

if (f==0)

g.drawArc (130,135,40,40,0,-180);

else {

g.drawArc (130,170,40,40,0,180);

}

}

}

1. 26 A. Write a Multithreading program in java to display all the alphabets from A to Z after 3 seconds.
2. 27 B) Write a Multithreading program in java to create an applet that contains a TextField to show time. The time should be displayed in the hh:mm:ss format. The thread should start when the user clicks the Start button and stop when the user clicks the stop button. Initialize the values to current time.

**SERVLET**

1. 2 B)Write a SERVLET program which counts how many times a user has visited a web page. If user is visiting the page for the first time, display a welcome message. If the user is revisiting the page, display the number of times visited. (Use cookies)
2. 8 B)Write a SERVLET application to accept username and password, search them into database, if found then display appropriate message on the browser otherwise display error message.
3. 11 B)Write a SERVLET program to display addition of two numbers.
4. 15 B) Write a SERVLET program in java to accept details of student (SeatNo, Stud\_Name, Class, Total\_Marks). Calculate percentage and grade obtained and display details on page. [15 M]
5. 18B) Write a SERVLET program that provides information about a HTTP request from a client, such as IP address and browser type. The servlet also provides information about the server on which the servlet is running, such as the operating system type, and the names of currently loaded servlets.
6. 21 B) Write a SERVLET program to Design an HTML page containing 4 option buttons (Painting, Drawing, Singing and swimming) and 2 buttons reset and submit. When the user clicks submit, the server responds by adding cookie containing the selected hobby and sends the HTML page to the client. Program should not allow duplicate cookies to be written.
7. 30 B) Write a SERVLET program to display the details of Product (ProdCode, PName, Price) on the browser in tabular format. (Use database)

**JSP**

1. 1 B)Write a JSP script to accept username, store it into the session, compare it with password in another jsp file, if username matches with password then display appropriate message in html file.
2. 4 B) Write a JSP program to create an online shopping mall. User must be allowed to do purchase from two pages. Each page should have a page total. The third page should display a bill, which consists of a page total of whatever the purchase has been done and print the total. (Use Session)
3. 7 A)Write a JSP program to calculate sum of first and last digit of a given number. Display sum in Red Color with font size 18.
4. 12 B)Write a JSP program to accept the details of Account (ANo, Type, Bal) and store it into database and display it in tabular form. (Use PreparedStatement interface) [15 M]
5. 16 A) Write a JSP program which accept UserName in a TextBox and greets the user according to the time on server machine. [15 M]
6. 19 A) Create a JSP page to accept a number from an user and display it in words: Example: 123 – One Two Three. The output should be in red color.
7. 20 A) Write a JSP program to display the details of Hospital (HNo, HName, Address) in tabular form on browser. [15 M]
8. 23 A) Write a JSP script to accept the details of Student (RNo, SName, Gender, Computer\_ Knowledge , Class) and display it on the browser. Use appropriate controls for accepting data.
9. 24 A) Write a JSP script to check whether given mail ID is valid or not. (Mail ID should contain one @ symbol) [15 M]
10. 25 Q1. Write a JSP script to accept UserName and his NickName through html page and then displays username when visit count to page is odd and displays nickname when the visit count to the page is even. [15 M]
11. 28 A) Write a JSP program to check whether given number is Armstrong or not. (Use Include directive). [15 M]
12. 29 A) Write a JSP program to accept Name and Age of Voter and check whether he is eligible for voting or not.
13. 30 A) Write a JSP program to display all the prime number’s between 1 to n in “Blue” Color. [15 M]