Unsolved Questions:

1. What members of a class out of private, protected and public are inheritable?

2. When do we declare a method or class 'final'?

3. What is an abstract class?

4. When do we declare a method or class abstract?

5. What is the difference between an abstract class and an interface?

CHAPTER 8

GUI DIALOGS AND TABLES

Brief Summary of the Chapter:

This chapter tells us about how we can create dialogs in Java Swing through NetBeans IDE.
KEY POINTS:

➢ **A Dialog**: It is a small separate window that appears to either provide or request to/from the user.

➢ Java Swing provides four dialog types: **a) JDialog**(General purpose dialogs) **b) JOptionPane** (Pre-defined styles**) c) JFileChooser** (dialog for choosing files) **and d) JColorChooser**(dialog for choosing colour)

➢ **JOptionPane dialog Type**:

There are four built-in dialog styles:
1) Message dialog➔ **JOption.ShowMessageDialog()** displays the message dialog

2) Input dialog➔ **JOption.ShowInputDialog()** displays the input dialog

3) Confirm dialog➔ **JOption.ShowConfirmDialog()** displays the confirm dialog

4) Option dialog➔ **JOption.ShowOptionDialog()** displays the option dialog

Solved Questions:

1. What is dialog in Java?
   Ans: A dialog is a small separate window that appears to either provide or request to / from the user.
2. Write the import statement required for using JOptionPane class.
   Ans:import javax.swing.JOptionPane;
3. What is showConfirmDialog ( ) method of JOptionPane class do ?
   Ans: This method displays a dialog with several buttons and returns as int option type corresponding to the button pressed (mostly one from Yes, No or Cancel)
4. What is showInputDialog ( ) method of JOptionPane class do ?
   Ans: This method displays a dialog which is intended to receive user input, and returns a String if the input component is a text field. It displays two buttons : OK and Cancel.
5. What is the difference between a dialog created with JDialog and a dialog created with JOptionPane?

Ans: The dialog created with JDialog can be customised in any form the user wants. Also with JDialog, a window's default cloasing behaviour is available with minimize, maximaize and close buttons.

A dialog created with JOptionPane can be one of the four pre-defined styles. Also, it only offers a close button for window closing.

Unsolved Questions:

1. What are the various type of dialog options supported by JOptionPane?

2. Name four methods associated with JOption dialog.

3. Explain the various possible value for Option type property of JOptionPane dialog.

CHAPTER 9

JAVA DATABASE CONNECTIVITY TO MYSQL

Brief Summary of the Chapter:

In this chapter we shall know how to connect the front end NetBeans application with back-end databases through JDBC,ODBC for making GUI applications.

KEY POINTS:
➢ **Classes used for Database Connectivity**

- Driver Manager Class,
- Connection Class,
- Statement Class,
- ResultSet Class

➢ **Prerequisites for connecting to MySQL from Java**

MySQL provides connectivity for client applications developed in the Java Programming language via a JDBC driver known as MySQL Connector/J

➢ **Connection:**

A connection is the session between the application program and the database. To do anything with database, one must have a connection object.

➢ **Connecting to MySQL from Java :**

Steps for Creating Database Connectivity Application
There are mainly six steps –
Step-1 Import the Packages Required for Database Programming.
Step-2 Register the JDBC Driver
Step-3 Open a Connection
Step-4 Execute a Query
Step-5 Extract Data from Result set
Step-6 Clean up the Environment
Now to connect to a database, you need to know database's complete URL, the user's Id and password-
Jdbc:mysql://localhost/<database-name>?user="username" & password="password"

➢ **ResultSet Methods**