**showMessageDialog**

showMessageDialog([Component](https://docs.oracle.com/javase/7/docs/api/java/awt/Component.html) parentComponent,

[Object](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html) message)

showMessageDialog([Component](https://docs.oracle.com/javase/7/docs/api/java/awt/Component.html) parentComponent,

[Object](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html) message,

[String](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html) title,

int messageType)

showMessageDialog([Component](https://docs.oracle.com/javase/7/docs/api/java/awt/Component.html) parentComponent,

[Object](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html) message,

[String](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html) title,

int messageType,

[Icon](https://docs.oracle.com/javase/7/docs/api/javax/swing/Icon.html) icon)

**Parameters:**

parentComponent - determines the Frame in which the dialog is displayed; if null, or if the parentComponent has no Frame, a default Frame is used

message - the Object to display

title - the title string for the dialog

messageType - the type of message to be displayed: ERROR\_MESSAGE, INFORMATION\_MESSAGE, WARNING\_MESSAGE, QUESTION\_MESSAGE, or PLAIN\_MESSAGE

icon - an icon to display in the dialog that helps the user identify the kind of message that is being displayed

Example:

import javax.swing.JOptionPane;

public class SimpleDialog {

public static void main(String[] args){

JOptionPane.showMessageDialog(null, 8.9, "This is not an integer.", JOptionPane.PLAIN\_MESSAGE);

}

}

**showInputDialog**

showInputDialog([Component](https://docs.oracle.com/javase/7/docs/api/java/awt/Component.html) parentComponent,

[Object](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html) message)

showInputDialog([Component](https://docs.oracle.com/javase/7/docs/api/java/awt/Component.html) parentComponent,

[Object](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html) message,

[Object](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html) initialSelectionValue)

showInputDialog([Component](https://docs.oracle.com/javase/7/docs/api/java/awt/Component.html) parentComponent,

[Object](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html) message,

[String](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html) title,

int messageType)

showInputDialog([Component](https://docs.oracle.com/javase/7/docs/api/java/awt/Component.html) parentComponent,

[Object](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html) message,

[String](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html) title,

int messageType,

[Icon](https://docs.oracle.com/javase/7/docs/api/javax/swing/Icon.html) icon,

[Object](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html)[] selectionValues,

[Object](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html) initialSelectionValue)

**Parameters:**

parentComponent - the parent Component for the dialog

message - the Object to display

title - the String to display in the dialog title bar

messageType- the type of message to be displayed: ERROR\_MESSAGE, INFORMATION\_MESSAGE, WARNING\_MESSAGE, QUESTION\_MESSAGE, or PLAIN\_MESSAGE

icon - the Icon image to display

selectionValues - an array of Objects that gives the possible selections

initialSelectionValue - the value used to initialize the input field

Example 1:

import javax.swing.\*;

public class JOptionPaneExample {

public static void main(String[] args) {

/\* JOptionPane Java user input example \*/

var name = *JOptionPane*.showInputDialog("What is your name?");

var output = name + " is such a nice name!";

*JOptionPane*.showMessageDialog(null, output);

}

}

Example 2:

import javax.swing.ImageIcon;

import javax.swing.JOptionPane;

public class InputDialog6a {

public static void main(String[] args) {

String[] options = {"I adore turtles", "Yes", "Maybe", "Urm...", "No", "Hate them"};

ImageIcon icon = new ImageIcon("src/images/turtle32.png");

String n = (String)JOptionPane.showInputDialog(null, "Do you like turtles??", "I like turtles", JOptionPane.QUESTION\_MESSAGE, icon, options, options[2]);

System.out.println(n);

}

}

**showConfirmDialog**

showConfirmDialog([Component](https://docs.oracle.com/javase/7/docs/api/java/awt/Component.html) parentComponent,

[Object](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html) message)

showConfirmDialog([Component](https://docs.oracle.com/javase/7/docs/api/java/awt/Component.html) parentComponent,

[Object](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html) message,

[String](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html) title,

int optionType)

showConfirmDialog([Component](https://docs.oracle.com/javase/7/docs/api/java/awt/Component.html) parentComponent,

[Object](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html) message,

[String](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html) title,

int optionType,

int messageType)

showConfirmDialog([Component](https://docs.oracle.com/javase/7/docs/api/java/awt/Component.html) parentComponent,

[Object](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html) message,

[String](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html) title,

int optionType,

int messageType,

[Icon](https://docs.oracle.com/javase/7/docs/api/javax/swing/Icon.html) icon)

**Parameters:**

parentComponent - determines the Frame in which the dialog is displayed; if null, or if the parentComponent has no Frame, a default Frame is used

message - the Object to display

title - the title string for the dialog

optionType - an int designating the options available on the dialog: YES\_NO\_OPTION, YES\_NO\_CANCEL\_OPTION, or OK\_CANCEL\_OPTION

messageType - an int designating the kind of message this is, primarily used to determine the icon from the pluggable Look and Feel: ERROR\_MESSAGE, INFORMATION\_MESSAGE, WARNING\_MESSAGE, QUESTION\_MESSAG, or PLAIN\_MESSAGE

icon - the icon to display in the dialog

Example:

import javax.swing.\*;

public class JOptionPaneExample {

public static void main(String[] args) {

/\* JOptionPane Java user input example \*/

var yesOrNo = *JOptionPane*.showConfirmDialog(null, "What will it be?");

if (yesOrNo == 0) {

*JOptionPane*.showMessageDialog(null, "You chose yes!");

}

if (yesOrNo == 1) {

*JOptionPane*.showMessageDialog(null, "You chose no.");

}

if (yesOrNo == 2) {

*JOptionPane*.showMessageDialog(null, "You chose to cancel!");

}

}

}

**showOptionDialog**

showOptionDialog([Component](https://docs.oracle.com/javase/7/docs/api/java/awt/Component.html) parentComponent,

[Object](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html) message,

[String](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html) title,

int optionType,

int messageType,

[Icon](https://docs.oracle.com/javase/7/docs/api/javax/swing/Icon.html) icon,

[Object](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html)[] options,

[Object](https://docs.oracle.com/javase/7/docs/api/java/lang/Object.html) initialValue)

**Parameters:**

1. The first parameter is the *parentComponent*. You can set this to null if the dialog box will be rendered independently.
2. The second parameter is the prompt that will display inside the dialog box.
3. The third parameter is the text to be displayed in the title of the dialog box.
4. The fourth parameter is the *optionType*. This will be the number 0,1,2, or 3, to specify whether yes, no or cancel buttons appear.
5. The fifth parameter is the *messageType*. Similarly, this is the number 0,1 or 2 or 3 to specify whether an error, info, warning, question or default message icon will appear.
6. The sixth parameter is an optional image icon to display in the message box.
7. The seventh parameter is the array of options to use.
8. The eighth parameter is the array object to select as the default value.

Example

import javax.swing.\*;

public class ShowOptionDialogExample {

public static void main(String[] args) {

/\* Simple JOptionPane ShowOptionDialogJava example \*/

String[] options = { "Red", "Green", "Blue" };

var selection = JOptionPane.showOptionDialog(null, "Select one:", "Let's play a game!", 0, 3, null, options, options[0]);

if (selection == 0) {

JOptionPane.showMessageDialog(null, "You chose Red!");

}

if (selection == 1) {

JOptionPane.showMessageDialog(null, "You chose Green.");

}

if (selection == 2) {

JOptionPane.showMessageDialog(null, "You chose Blue!");

}

}

}

1. Write a simple addition application that uses two **input dialogs** to obtain integers from the user and a **message dialog** to display the sum of the integers the user enters. Use JOptionPane Dialog boxes to take your input from the user and display the output.
2. Write a program that inputs from the user the radius of a circle as an integer and prints the circle’s circumference and area using the predefined constant Math.PI. Use JOptionPane Dialog boxes to take your input from the user and display the output.
3. Write a program that prompts the user for two numbers, the breadth of a rectangle and the height of a rectangle. Use a message box to calculate the area of the rectangle. Use JOptionPane Dialog boxes to take your input from the user and display the output.
4. If a triangle has side lengths a,b,c, then the formula for the area of the triangle is area = √s(s − a)(s − b)(s − c), where s = (a + b + c)/2. Write a program that asks the user to enter three sides of triangle. The program should compute and display the area of triangle. Use JOptionPane Dialog boxes to take your input from the user and display the output.