



INSTITUTO FEDERAL  
DE EDUCAÇÃO, CIÊNCIA E TECNOLOGIA  
Bahia

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# Linguagem de Programação II

Introdução às Interfaces Gráficas de  
Usuário (GUI) em Java: Pacote Swing  
(JFrame, JPanel, JLabel, JTextField,  
JPasswordField e JButton)



# Roteiro

- Introdução às Interfaces Gráficas de Usuário (GUI) em Java (Swing):
  - Introdução;
  - Componentes;
  - JFrame (Janela);
  - Netbeans e Swing
  - JButton (Botão)
  - JLabel (Rótulo ou Etiquetas);
  - JTextField (Campo de Texto);
  - JPasswordField (Campo de Senha);





# Java Swing - Introdução

- Na **Interface Gráfica** é necessário definir quais **componentes (objetos)** serão utilizados e a **disposição** que **eles** terão na **janela (objeto)**.

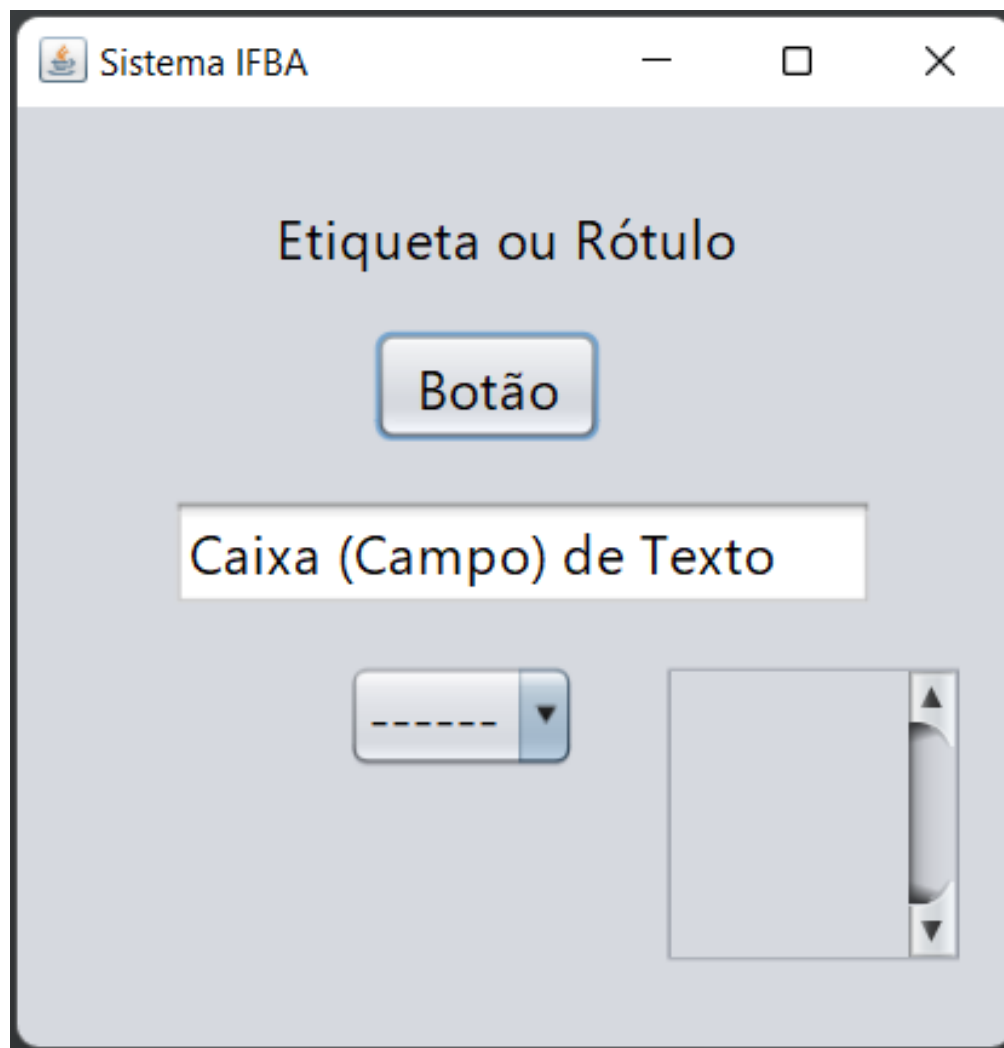


# Java Swing – Componentes

- Um **componente** da **Interface Gráfica** é um **objeto visual (Java)** que possibilita realizar a **interação com o programa** por meio do **mouse** e do **teclado**.
- Ex.: **etiquetas, botões, caixas de texto, painéis de rolagem, menus, objetos de múltipla escolha**, entre outros.



# Java Swing – Componentes



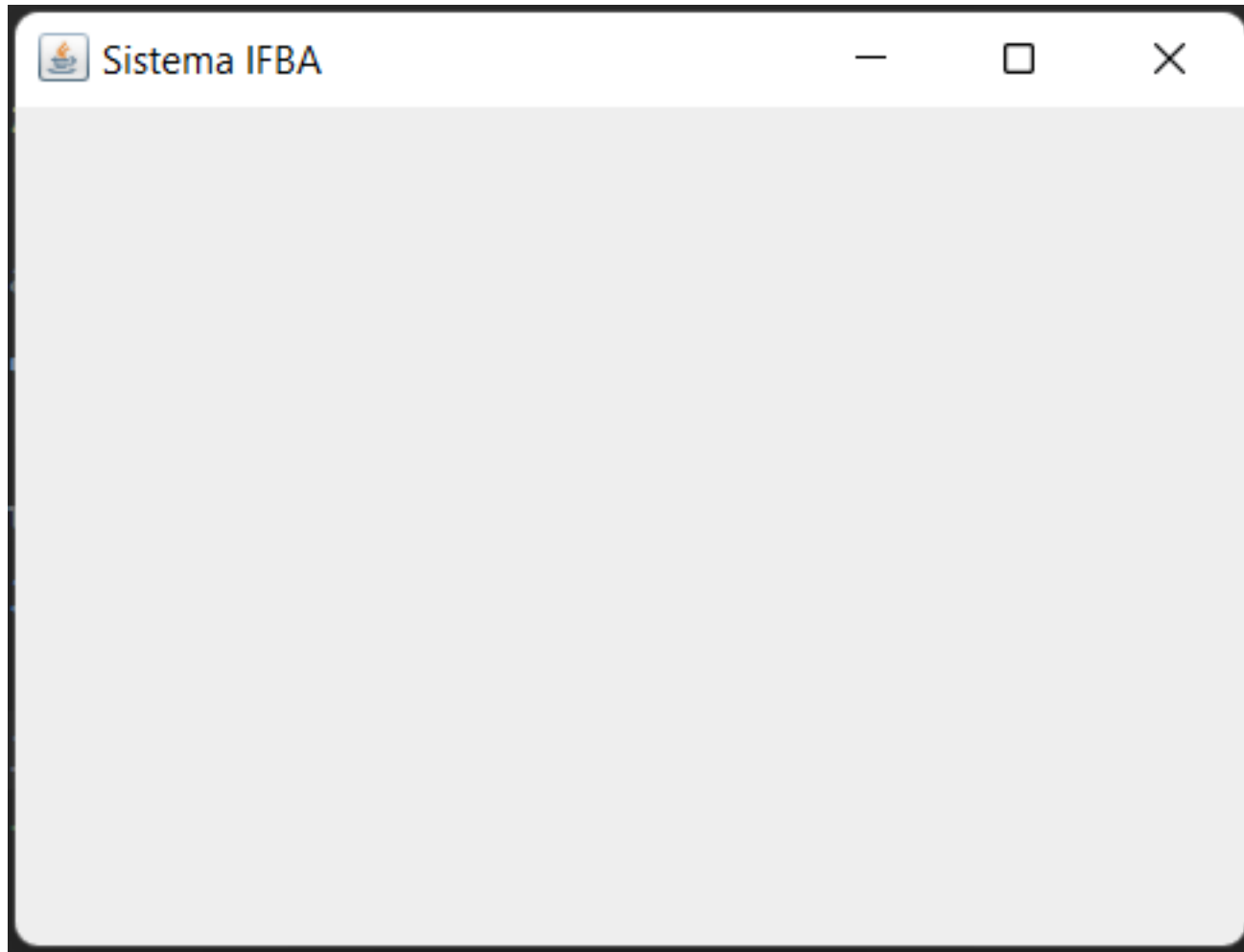
# Java Swing – JFrame

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- Para criar **Janelas** utilizaremos a classe **JFrame** disponível no pacote **swing**, a qual gera uma **janela** com **barra de título**, **bordas** e eventualmente outros **componentes visuais**.

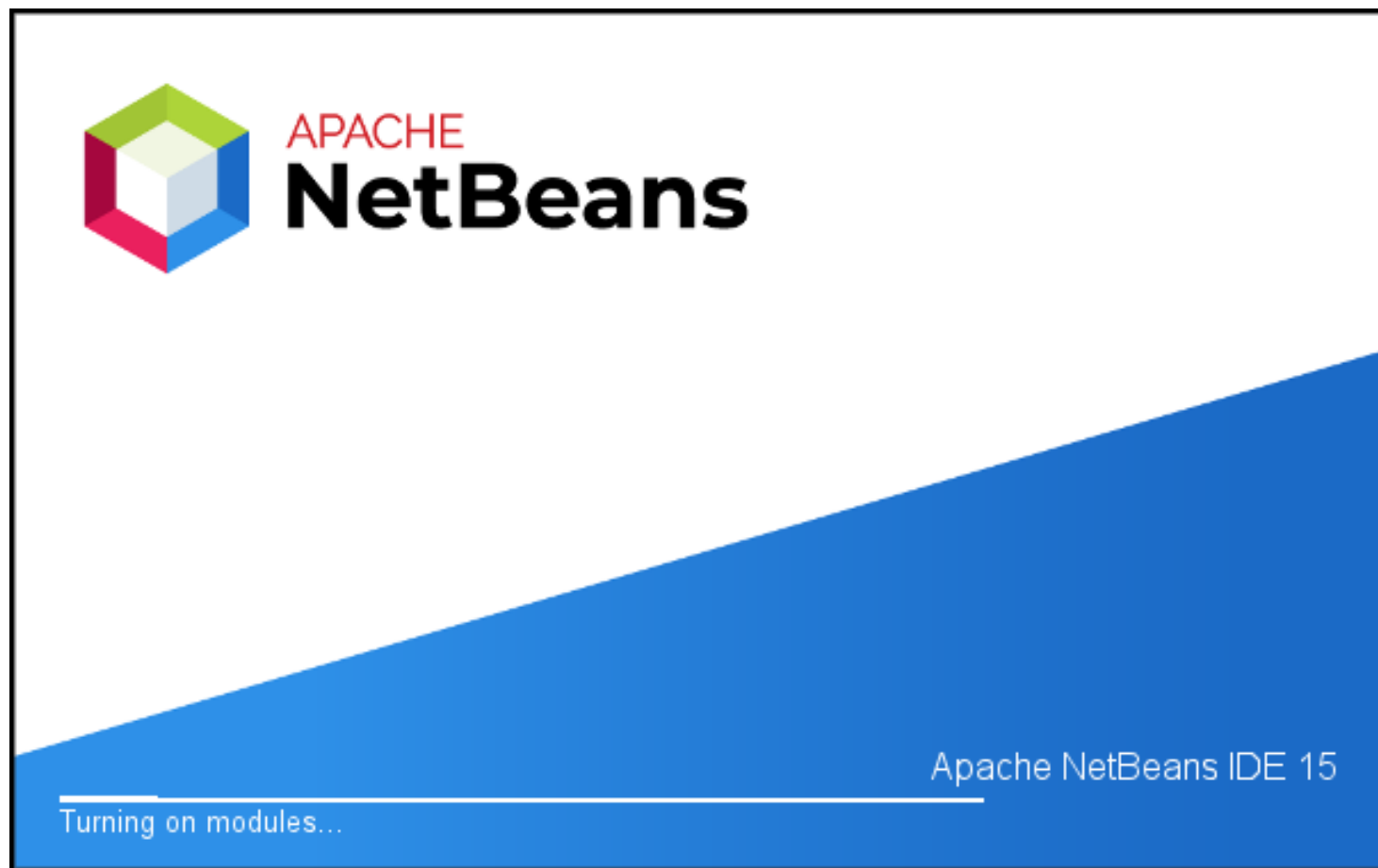


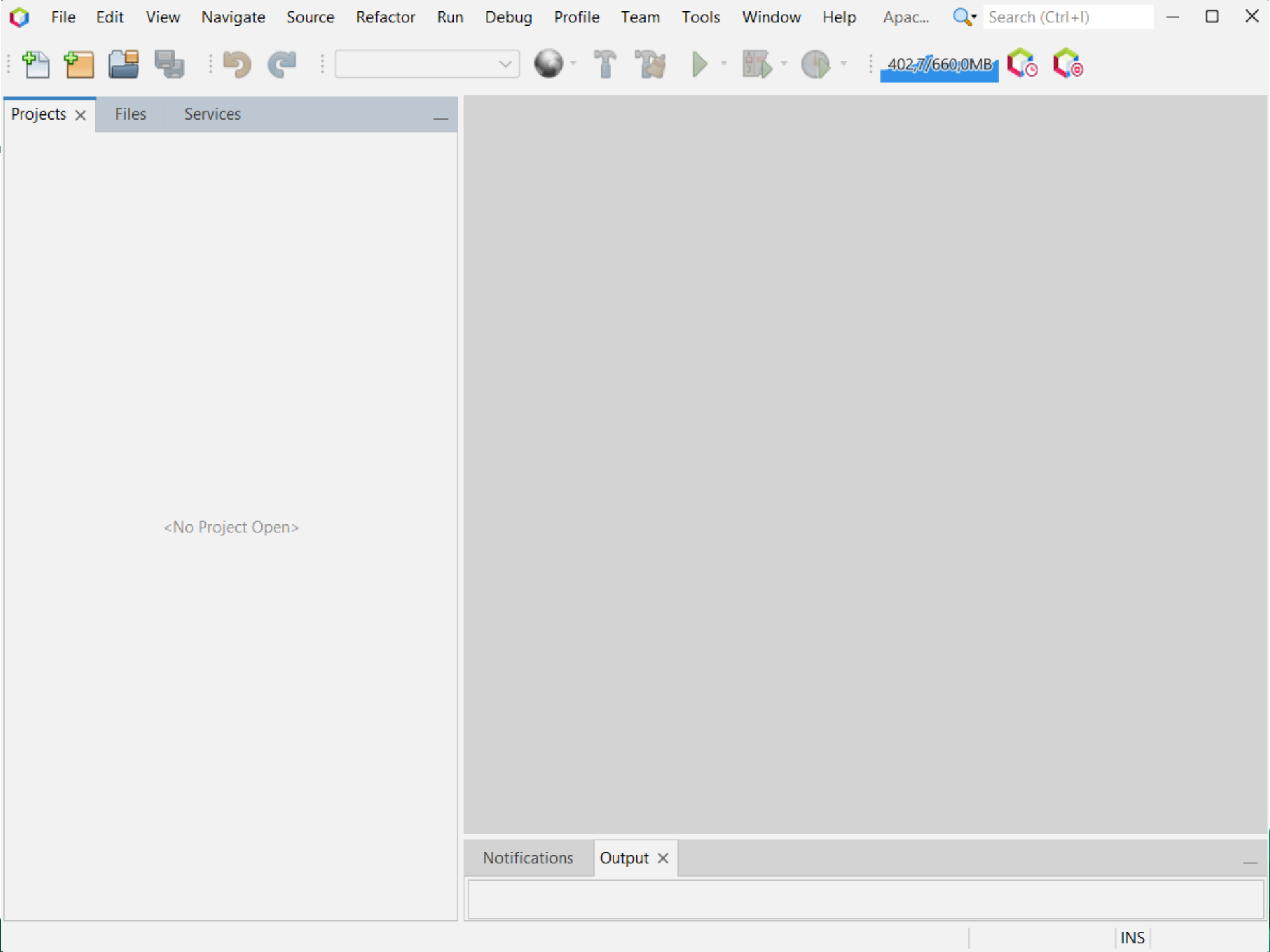
# Java Swing – JFrame



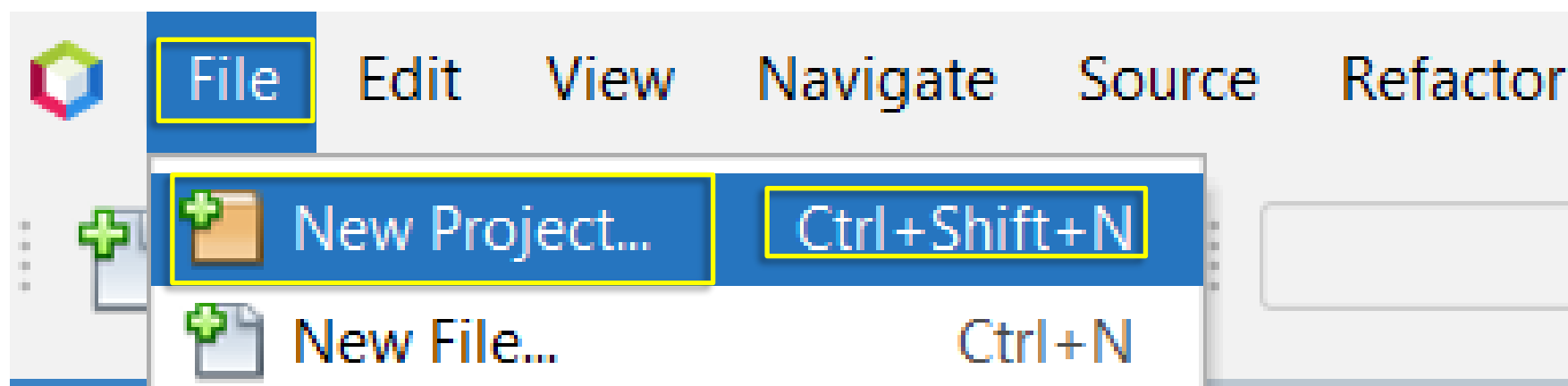


# Netbeans: IDE





# Netbeans: Novo Projeto



# Netbeans: Novo Projeto

## Choose Project



Filter:

### Categories:

- Java with Maven
- Java with Gradle
- Java with Ant
- JavaFX
- Java Web

### Projects:

- Java Application
- Java Class Library
- Java Project with Existing Sources
- Java Modular Project
- Java Free-Form Project



# Netbeans: Novo Projeto

**Name and Location**

Project Name:

Project Location:

Project Folder:

☐ Use Dedicated Folder for Storing Libraries

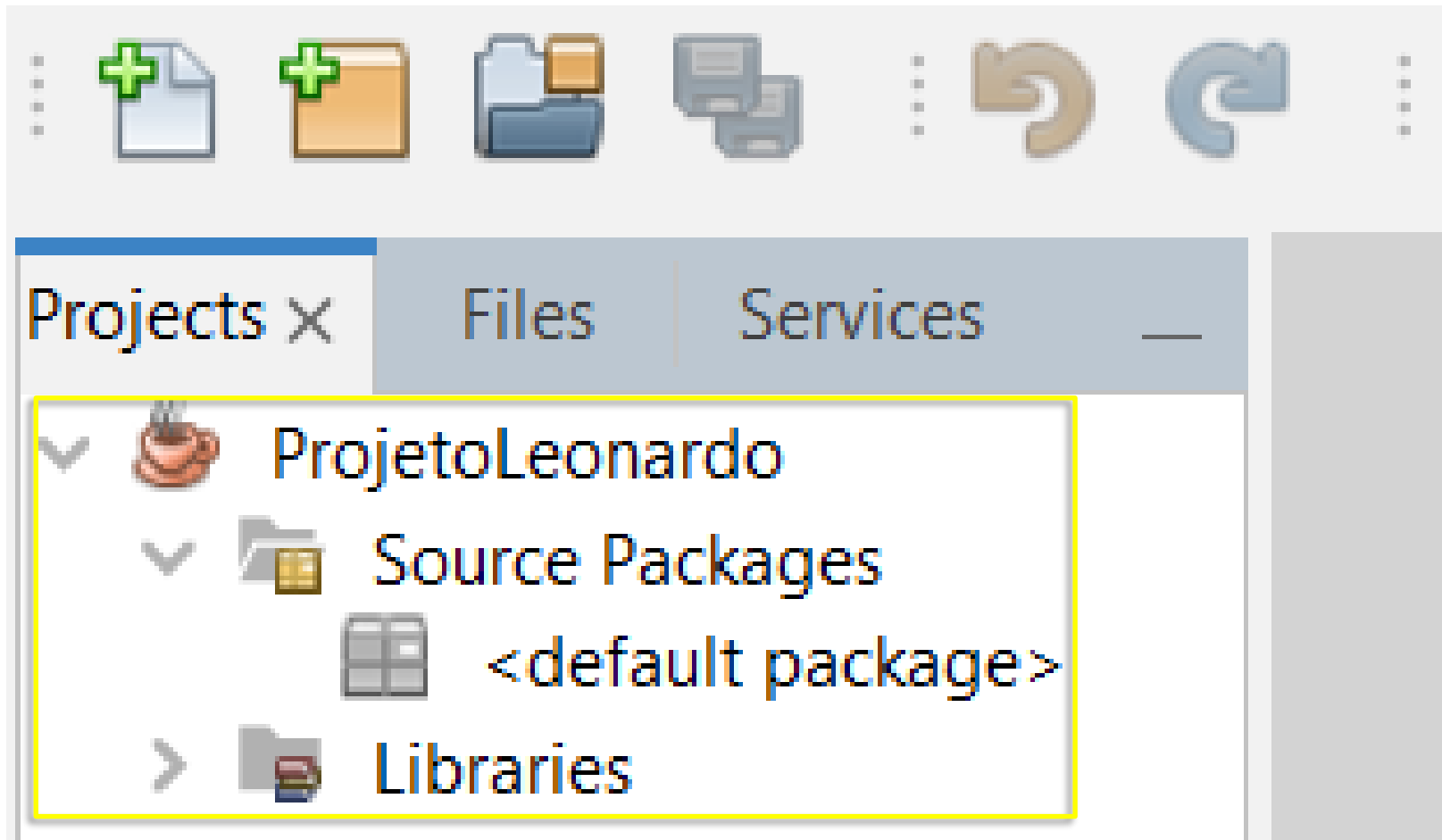
Libraries Folder:

Different users and projects can share the same compilation libraries (see Help for details).

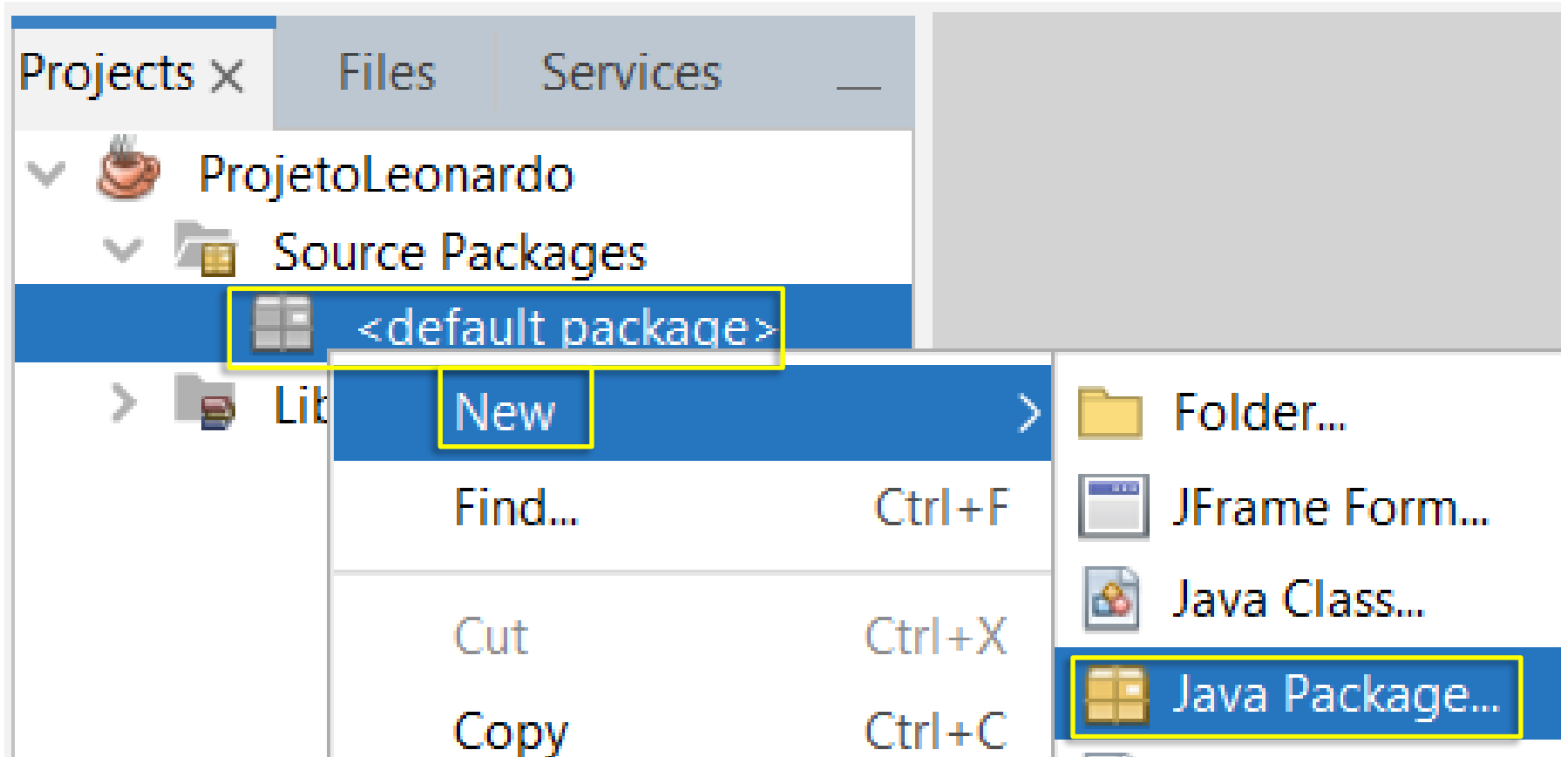
☐ Create Main Class



# Netbeans: Novo Projeto



# Netbeans: Novo Pacote



# Netbeans: Novo Pacote

## Name and Location

Package Name:

Principal

Project:

ProjetoLeonardo

Location:

Source Packages

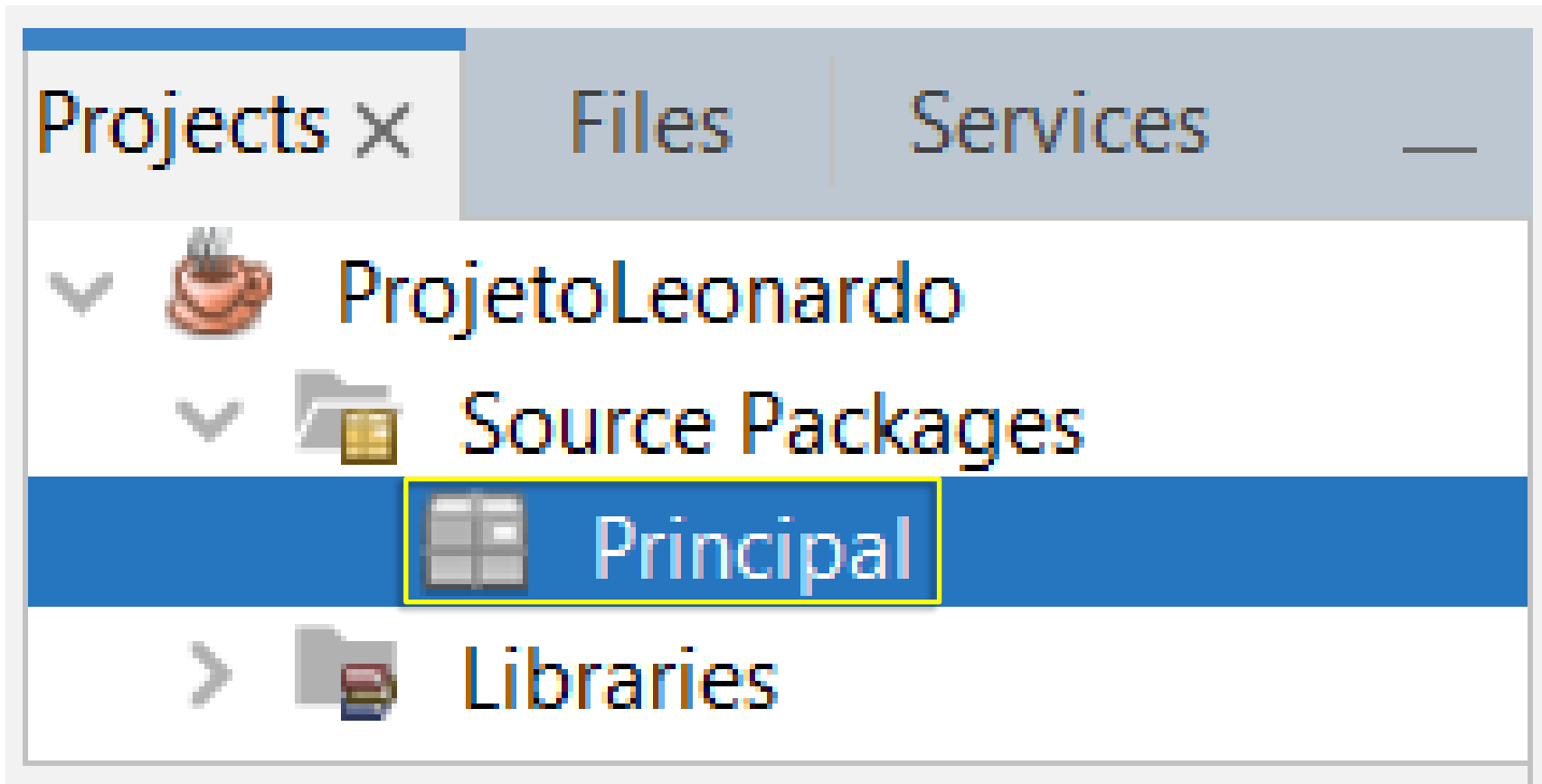
Created Folder:

.:\\Users\\leomi\\Documents\\NetBeansProjects\\ProjetoLeonardo\\src\\Principal

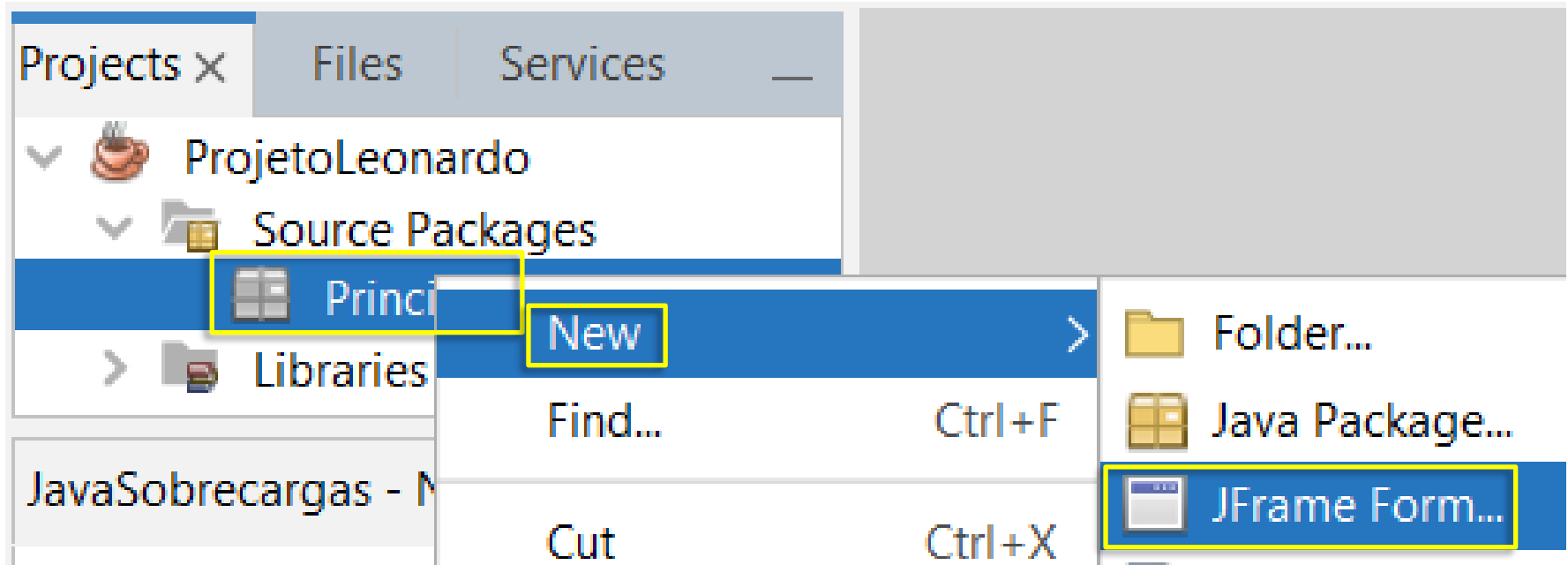




# Netbeans: Novo Pacote



# Netbeans: Nova Janela (JFrame)



# Netbeans: Nova Janela (Jframe)

## **Name and Location**

Class Name:

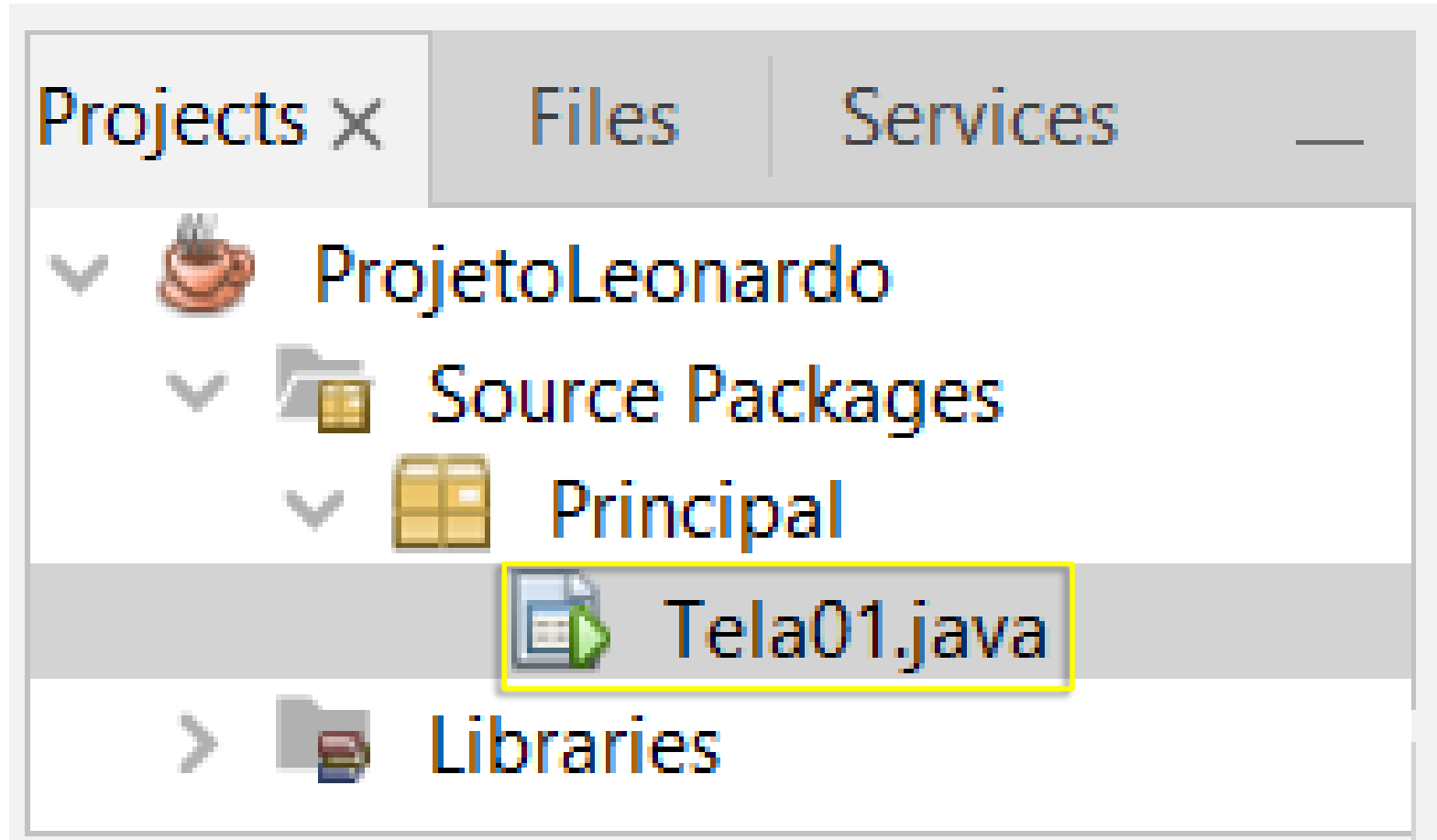
Project:

Location:

Package:



# Netbeans: Nova Janela (JFrame)



Projects x Files Services


- ProjetoLeonardo
  - Source Packages
    - Principal
      - Tela01.java
  - Libraries

[JFrame] - Navigator x

- Form Tela01
  - Other Components
    - [JFrame]

Tela01.java x

Source Design History



Palette x

Swing Containers

- Panel
- Tabbed Pane
- Split Pane
- Scroll Pane
- Tool Bar
- Desktop Pane
- Internal Frame

[JFrame] - Properties x

Properties Events

Code

Properties

defaultCloseOperation	EXIT_ON...	...
title		...

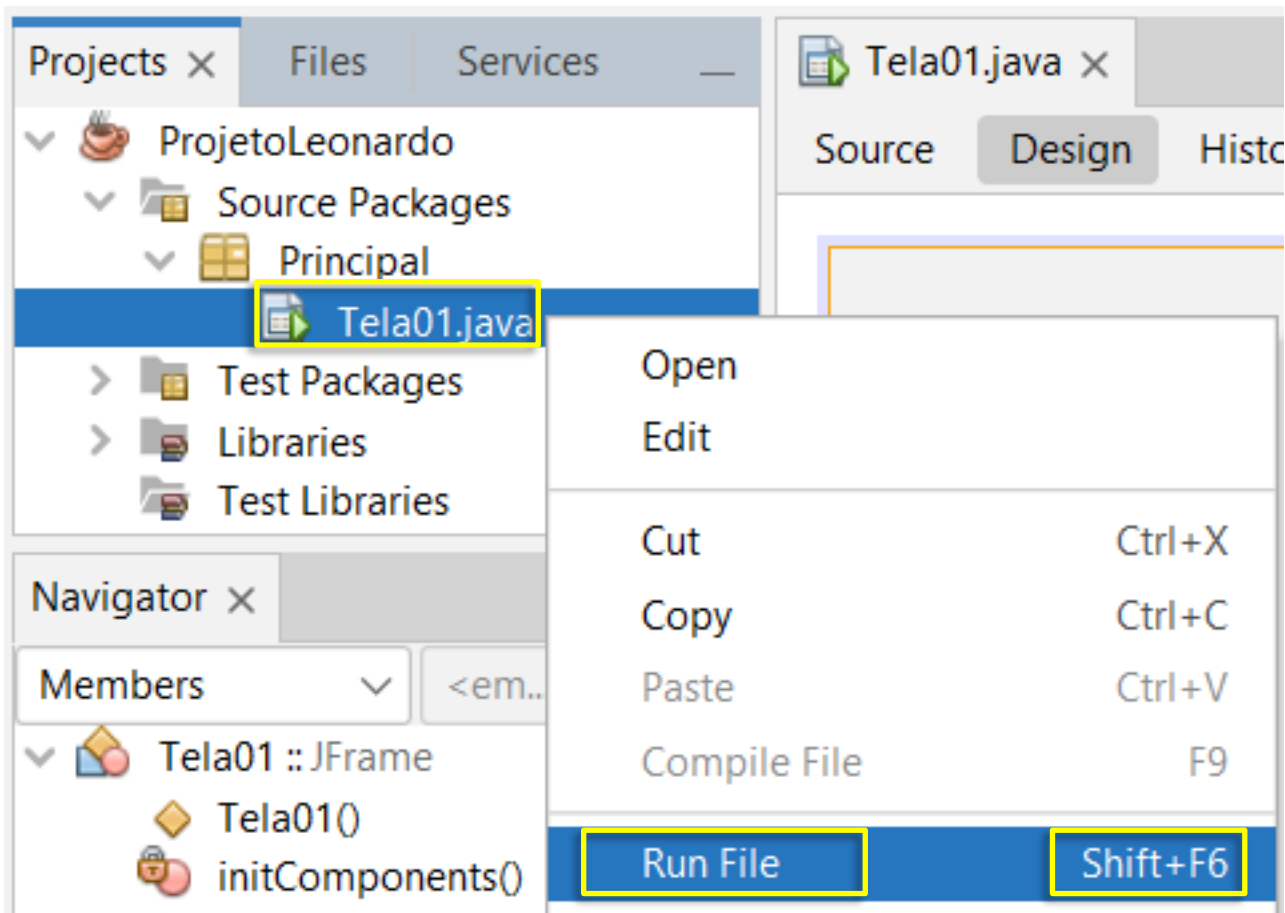
Other Properties

alwaysOnTop	<input type="checkbox"/>	...
alwaysOnTopSupport	<input checked="" type="checkbox"/>	...

[JFrame] ?

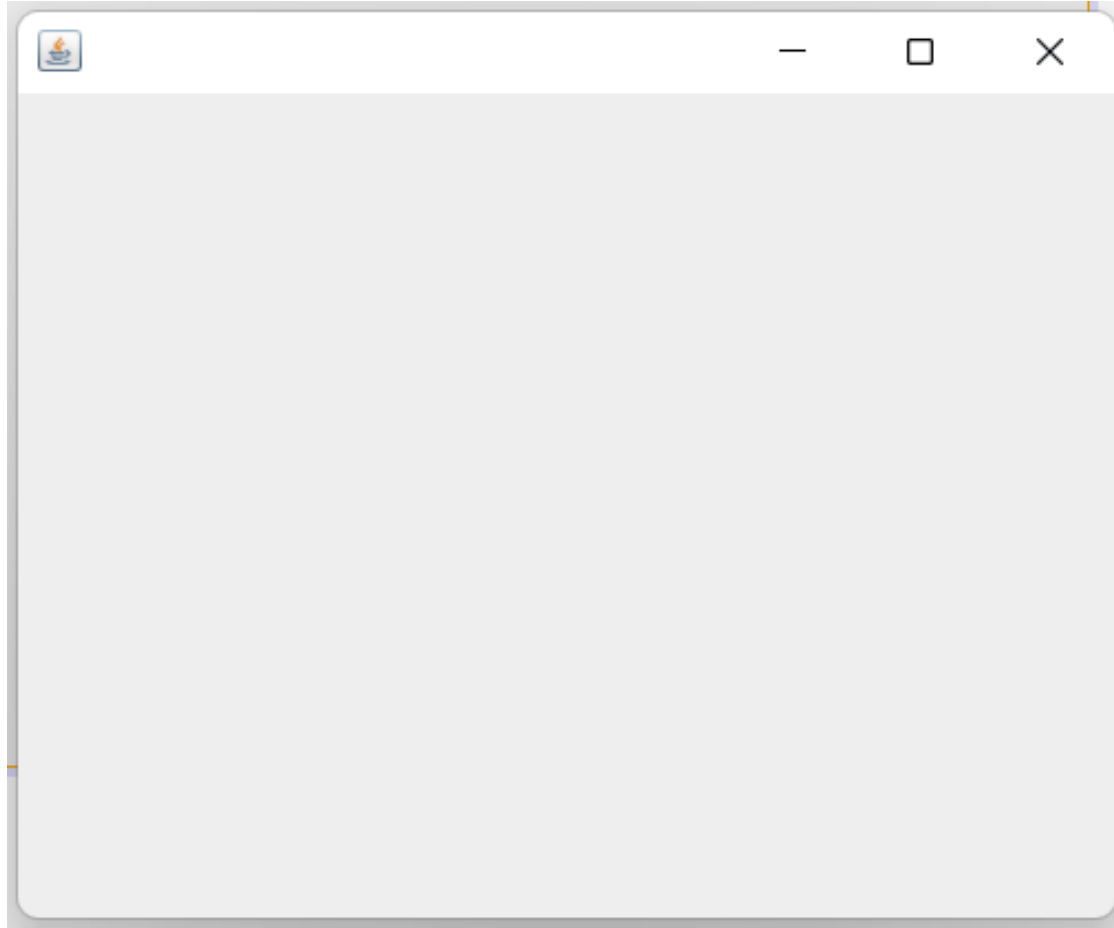
Notifications Output x

# Netbeans: Executando Janela (JFrame)



# Netbeans: Executando Janela (JFrame)

---





```
1 package Principal;
```

```
2  
3 public class Tela01 extends javax.swing.JFrame {
```

```
4  
5     public Tela01() {  
6         initComponents();  
7     }  
8
```

```
9 + Generated Code
```

```
27  
28     public static void main(String args[]) {  
29         new Tela01().setVisible(true);  
30     }  
31
```

```
32 // Variables declaration - do not modify  
33 // End of variables declaration  
34
```

```
}
```





```
1 package Principal;
```

Pacote

```
2  
3 public class Tela01 extends javax.swing.JFrame {
```

Construtor

Classe

Herança

```
4 public Tela01() {  
5     initComponents();  
6 }  
7
```

Chamada de método que  
inicializa componentes

Generated Code

Inicialização e configuração de  
componentes

Método estático "main"

```
27  
28 public static void main(String args[]) {  
29     new Tela01().setVisible(true);  
30 }  
31
```

Declaração  
de variáveis

Cria objeto (componente) Tela01 e o torna visível

```
32 // Variables declaration - do not modify  
33 // End of variables declaration  
34 }
```

```
// <editor-fold defaultstate="collapsed" desc="Generated Code">
```

```
private void initComponents() {
```

```
    setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
```

```
    javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
```

```
    getContentPane().setLayout(layout);
```

```
    layout.setHorizontalGroup(
```

```
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
            .addGap(0, 400, Short.MAX_VALUE)
```

```
    );
```

```
    layout.setVerticalGroup(
```

```
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
            .addGap(0, 300, Short.MAX_VALUE)
```

```
    );
```

```
    pack();
```

```
}// </editor-fold>
```

```
// <editor-fold defaultstate="collapsed" desc="Generated Code">
```

```
private void initComponents() {
```

Método

Comportamento do ícone (botão) de fechar o JFrame

```
setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
```

```
javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
```

```
getContentPane().setLayout(layout);
```

```
layout.setHorizontalGroup(
```

```
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
        .addGap(0, 400, Short.MAX_VALUE)
```

```
);
```

```
layout.setVerticalGroup(
```

```
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
        .addGap(0, 300, Short.MAX_VALUE)
```

```
);
```

```
pack();
```

Layout Manager do JFrame ajusta o tamanho da tela (Frame) com base em seus componentes internos

Configurações de Layout do JFrame

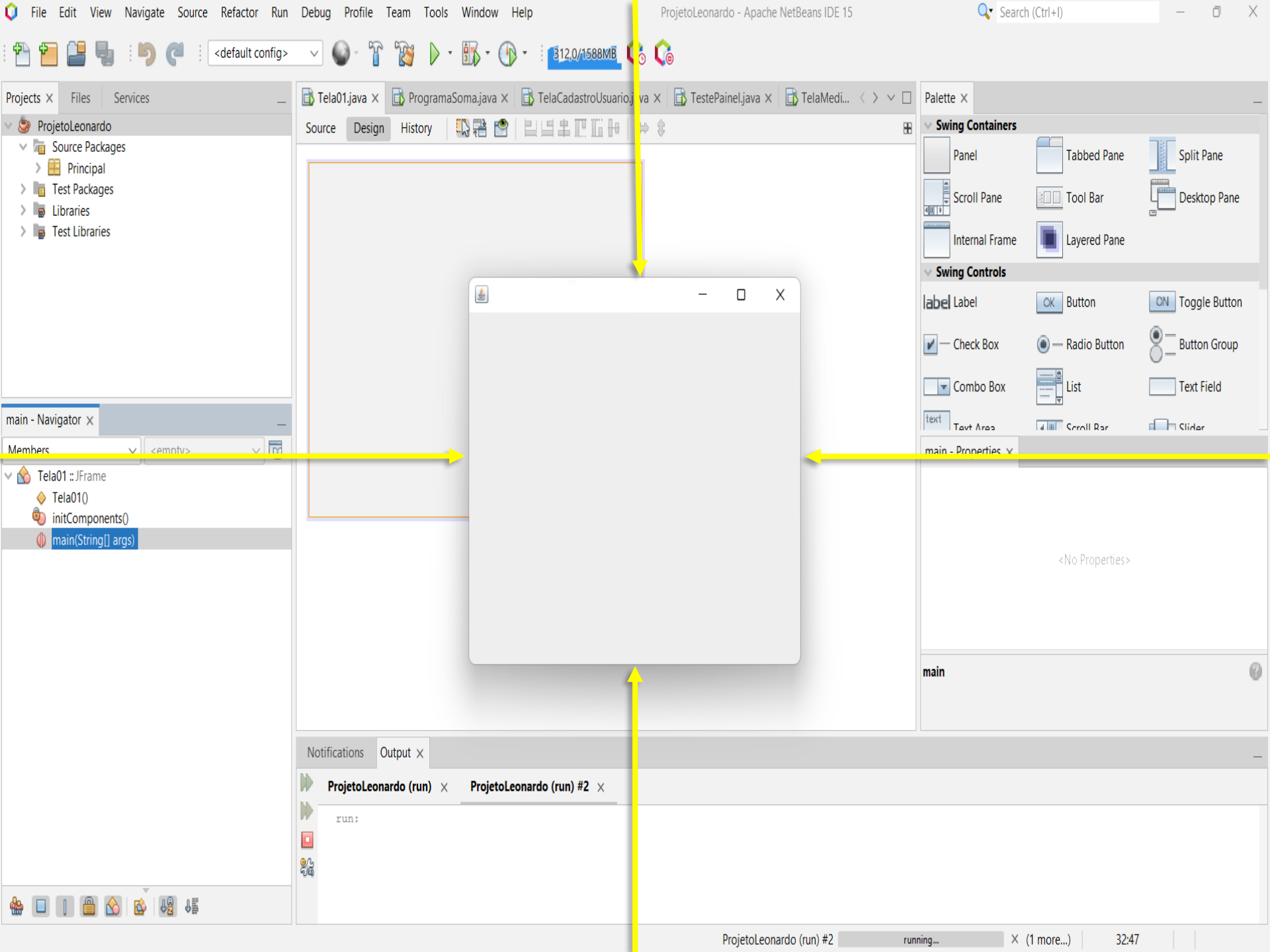
```
} // </editor-fold>
```

# Netbeans: Centralizar JFrame

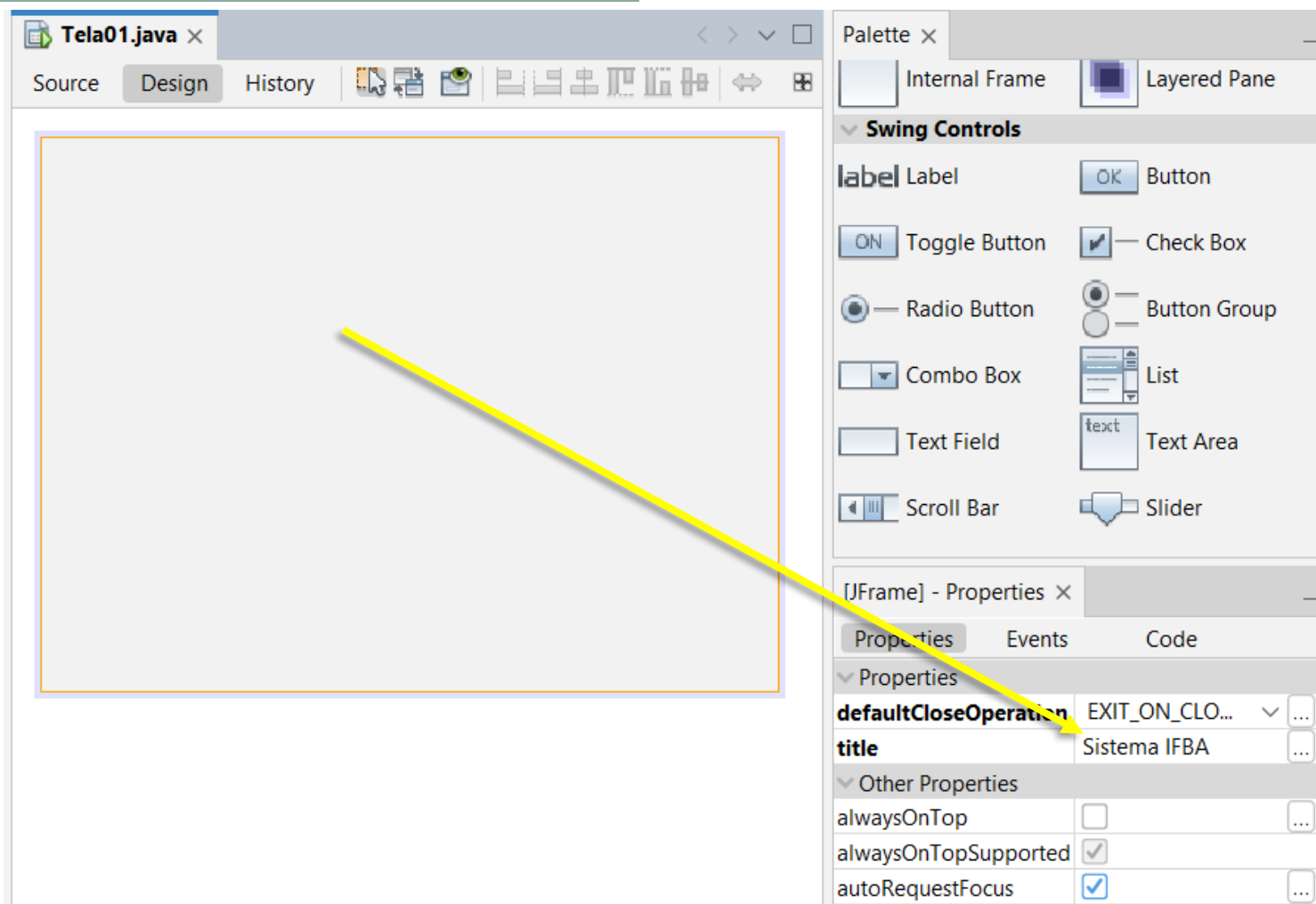
---

```
public Tela01 () {  
    initComponents () ;  
    this.setLocationRelativeTo (null) ;  
}
```

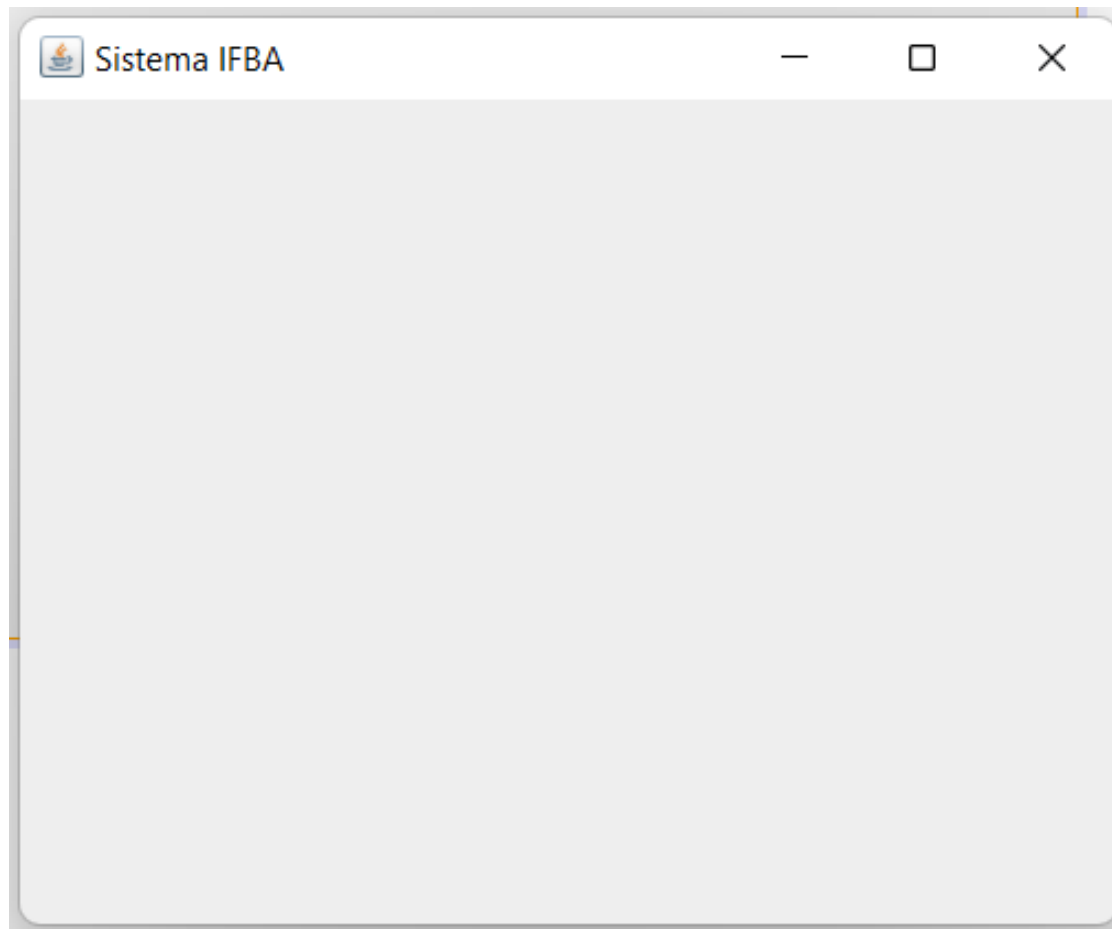




# Netbeans: Título da Janela (JFrame)



# Netbeans: Título da Janela (JFrame)



# Netbeans: Desabilitar Redimensionar

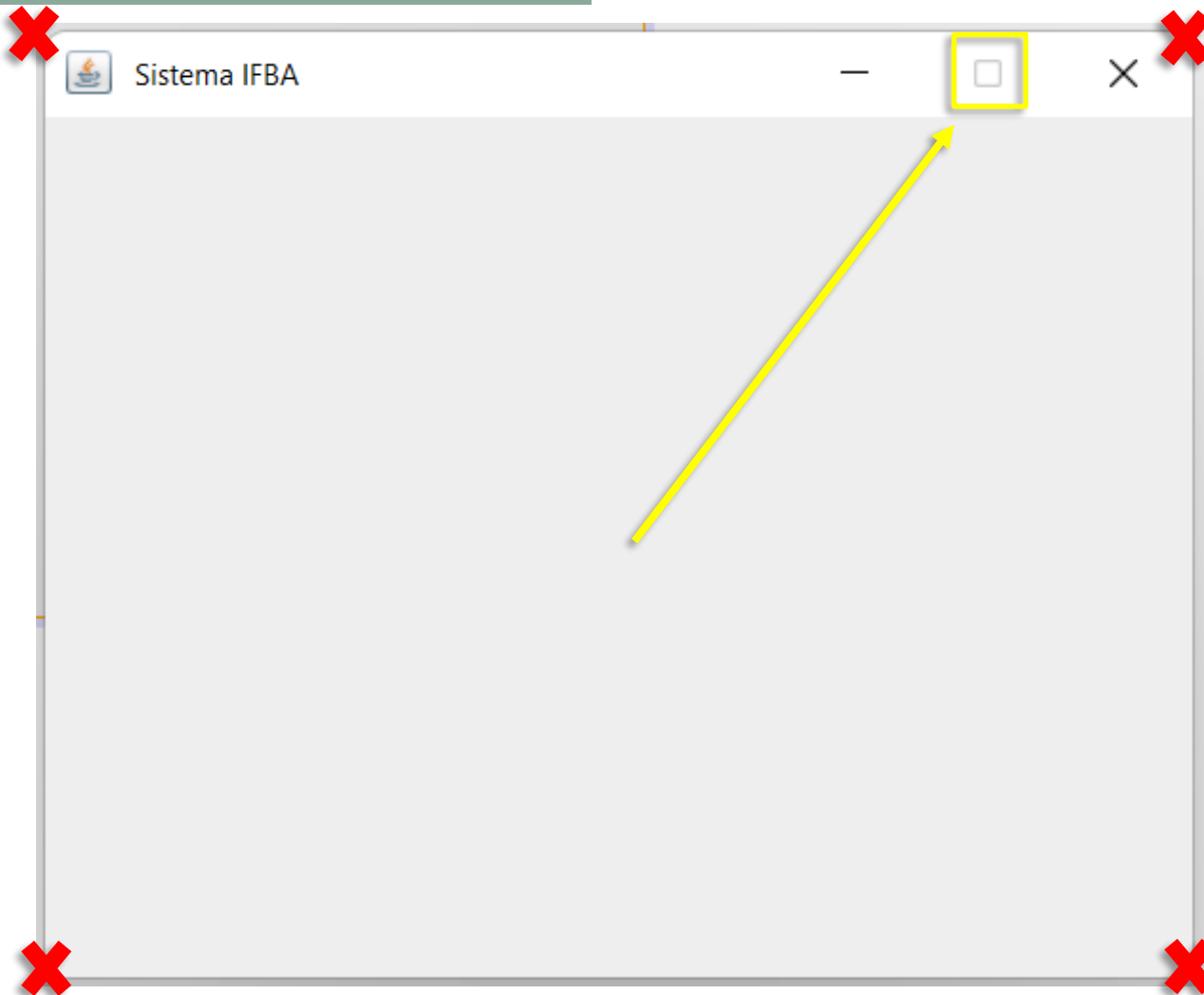
[JFrame] - Properties X

Properties	Events	Code
preferredSize	[395, 300]	...
<b>resizable</b>	<input type="checkbox"/>	...
shape	<none>	False
size	<Not Set>	...
state	0	...
type	NORMAL	...





# Netbeans: Desabilitar Redimensionar

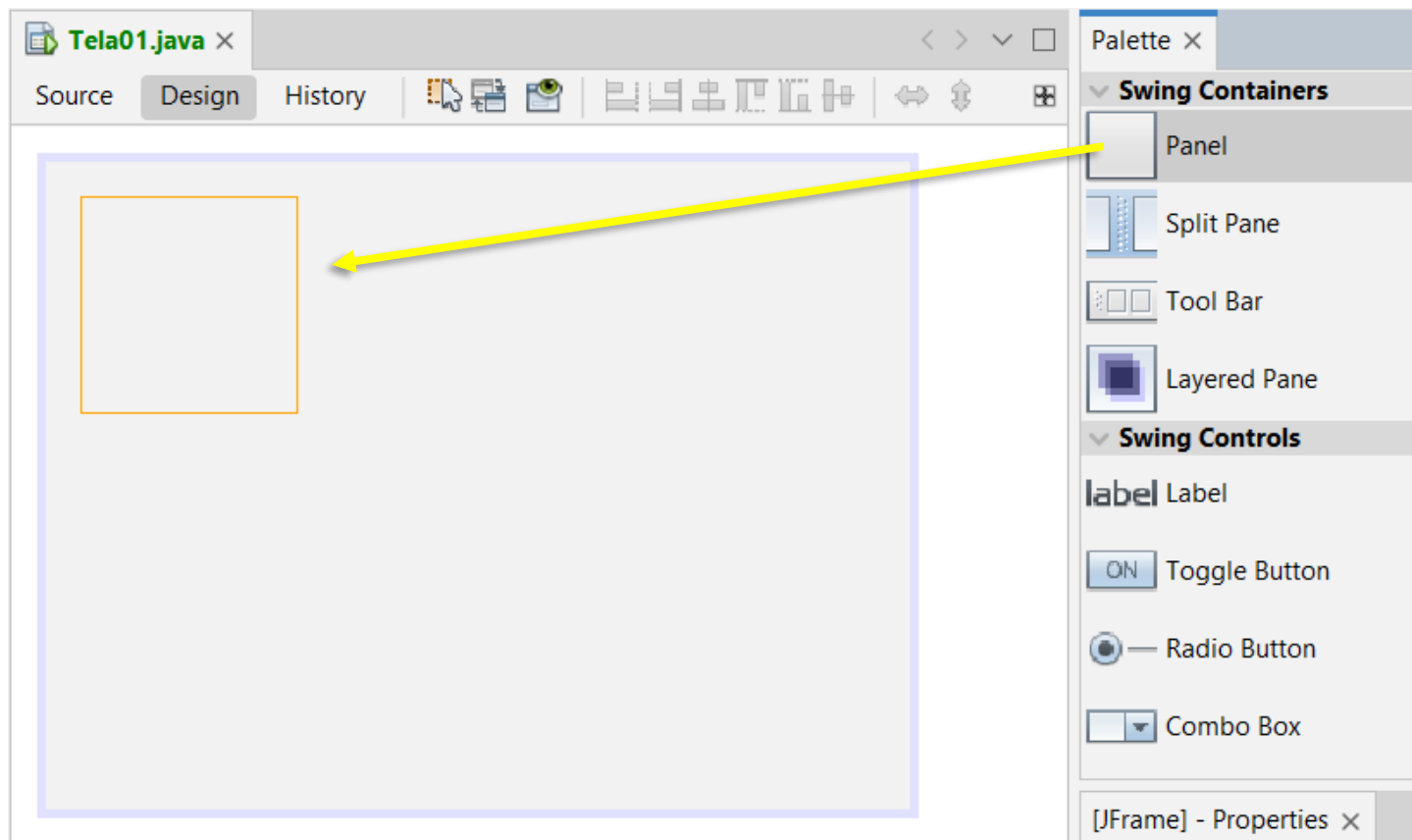


# Java Swing – JPanel

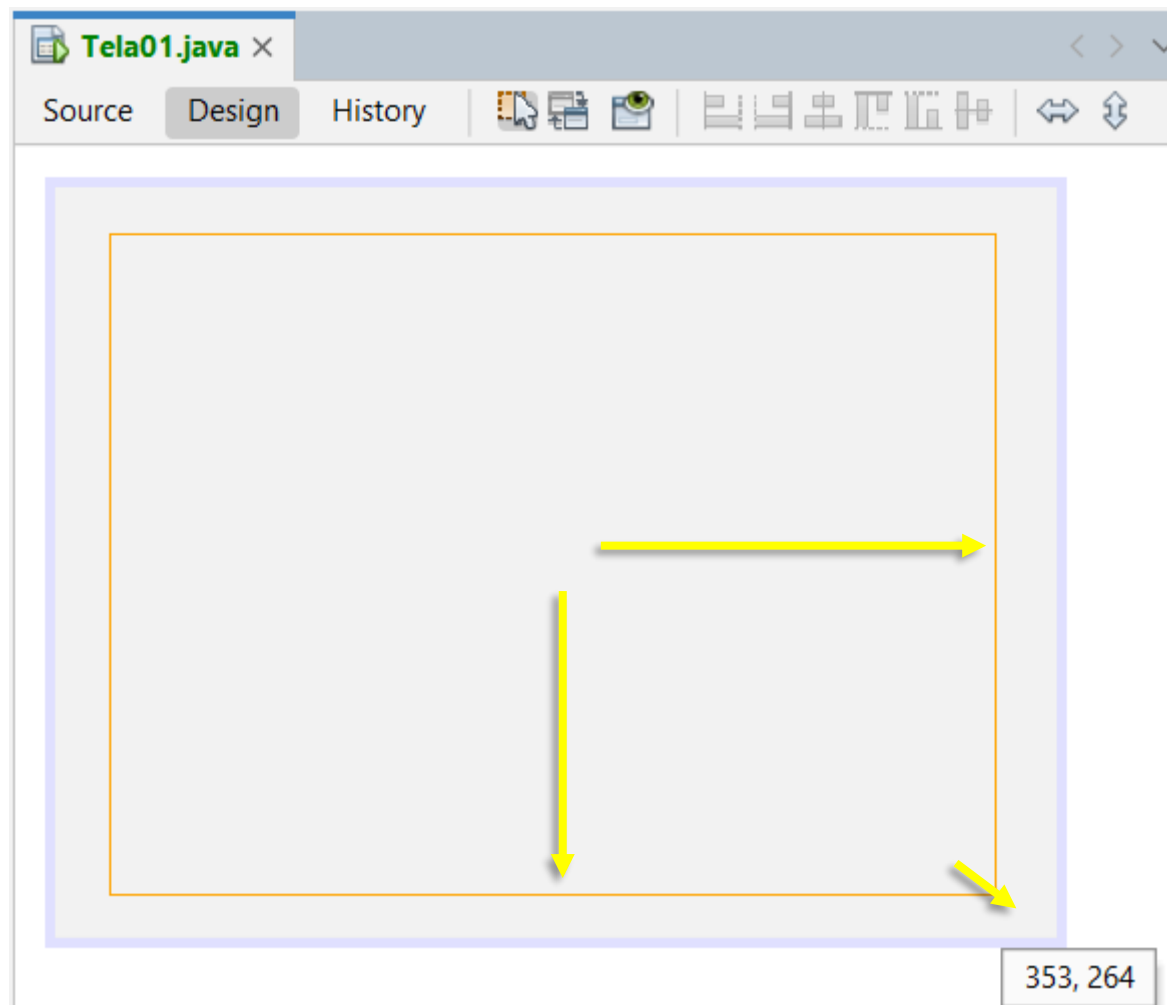
- O **JPanel** é um **contêiner flexível** no Java Swing, utilizado para **agrupar e organizar componentes** em interfaces gráficas.
- Ele **oferece opções de personalização**, como **layout e cor de fundo**, permitindo criar **interfaces atraentes e adaptáveis**.



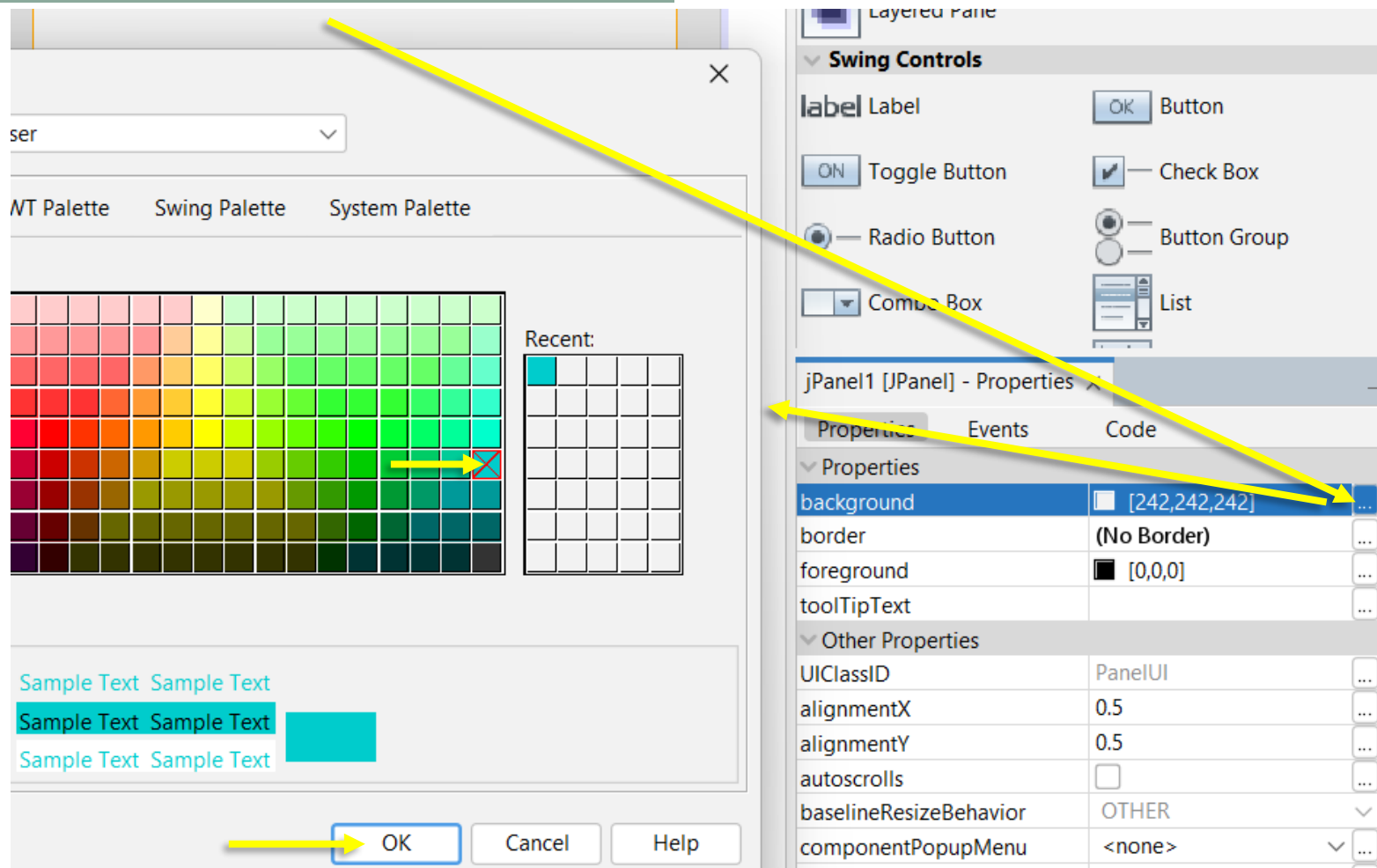
# Java Swing – JPanel - Adicionar



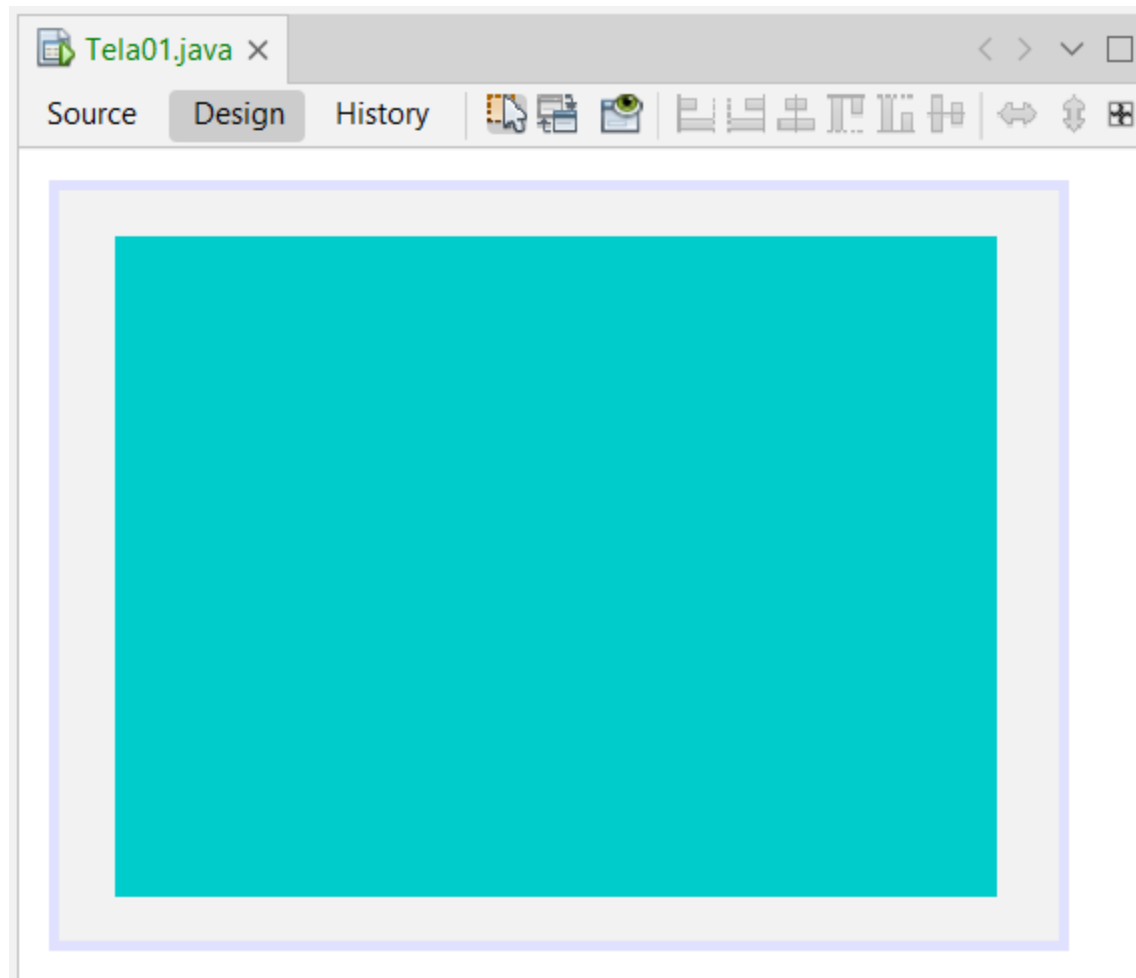
# Java Swing – JPanel - Redimensionar



# Java Swing – JPanel – Mudar Cor Fundo



# Java Swing – JPanel – Mudar Cor Fundo

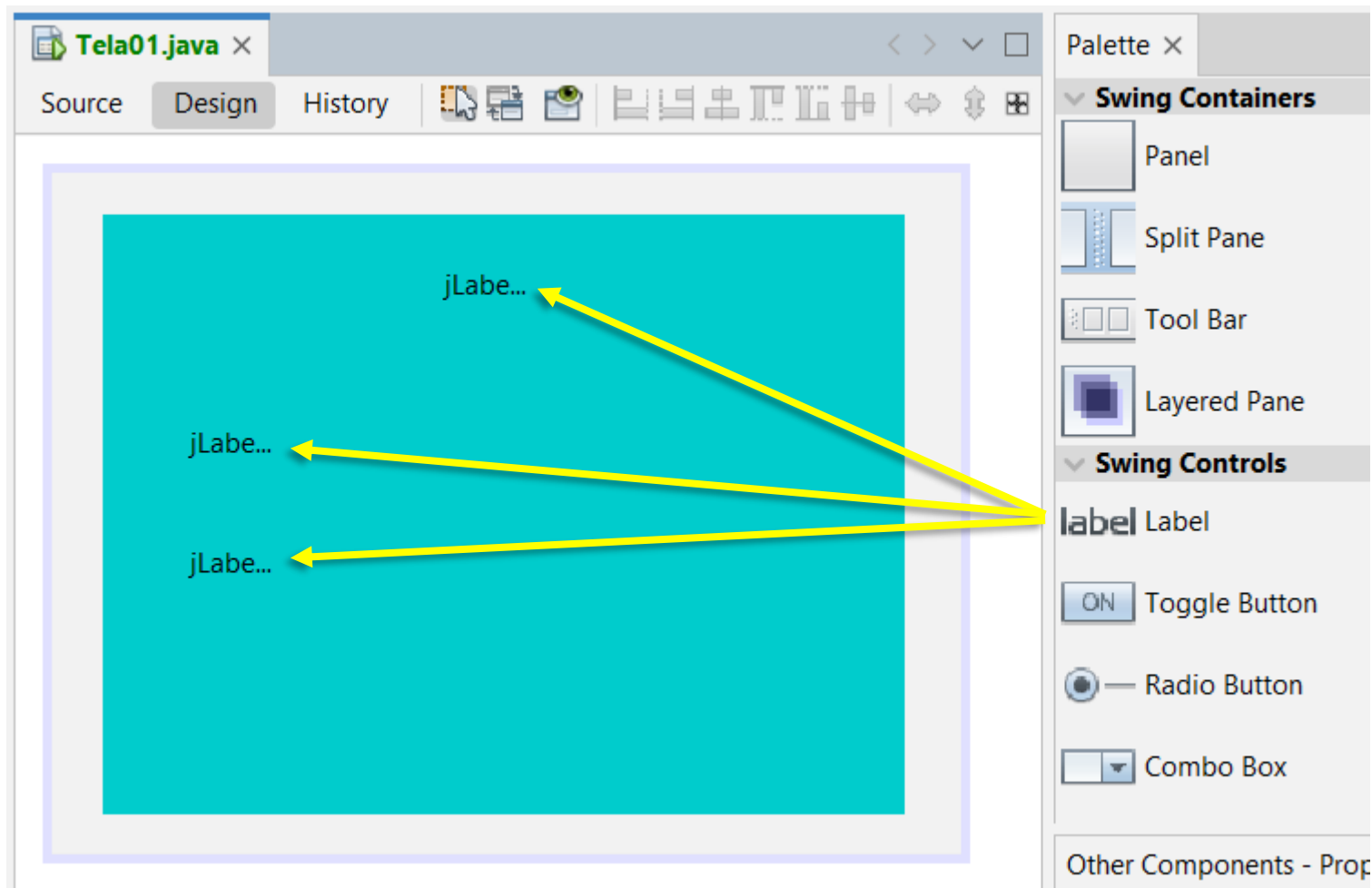


# Java Swing – JLabel

- A classe **JLabel** permite **definir um texto** que **pode ser adicionado** a um **outro componente** (frame, painel etc.).
- Podem ser definidas várias **propriedades** para esse texto, tais como **alinhamento**, **tipo de letra**, **tamanho**, **cor** etc.



# Java Swing – JLabel – Adicionar





# Java Swing – JLabel – Editor Texto

The screenshot displays the Java Swing IDE interface. The main window shows a design view of a Java Swing component named 'Tela01.java'. The component is a light blue rectangle with a white border. Inside, there is a white rectangular area labeled 'Tela 0...' with a yellow arrow pointing to it. Below this area, there are two labels: 'jLabe...' and 'jLabe...'. The 'Design' tab is selected in the top toolbar. The 'Palette' window on the right shows various Swing components. Under 'Swing Containers', there are 'Panel', 'Split Pane', 'Tool Bar', 'Layered Pane', 'Tabbed Pane', 'Scroll Pane', and 'Internal Frame'. Under 'Swing Controls', there are 'Label' and 'Button'. The 'Label' component is selected, and its properties are shown in the 'jLabel1 [JLabel] - Properties' window. The 'text' property is set to 'Tela 01'.

Palette

- Swing Containers
  - Panel
  - Split Pane
  - Tool Bar
  - Layered Pane
  - Tabbed Pane
  - Scroll Pane
  - Internal Frame
- Swing Controls
  - Label
  - Button

jLabel1 [JLabel] - Properties

Properties	Events	Code
icon		<none>
labelFor		<none>
<b>text</b>		Tela 01
toolTipText		



# Java Swing – JLabel – Editor Texto

The screenshot shows the Java Swing IDE with the following components:

- Design View:** A cyan rectangular area representing the GUI. Inside, there is a grey rectangular component labeled "Tela 0...". Below it, there is a smaller grey rectangular component labeled "Mens" with a yellow border and a small handle. Below that, there is a label component labeled "jLabe...".
- Palette:** A panel on the right side of the IDE showing various Swing components. It is divided into two sections: "Swing Containers" and "Swing Controls".
  - Swing Containers:** Panel, Split Pane, Tool Bar, Layered Pane, Tabbed Pane, Scroll Pane, Internal Frame.
  - Swing Controls:** label Label, OK Button.
- Properties Window:** A window titled "jLabel2 [JLabel] - Properties" with three tabs: "Properties", "Events", and "Code". The "Properties" tab is selected, showing the following properties:

Properties	Events	Code
icon		<none>
labelFor		<none>
<b>text</b>		Mensagem 1:
<b>toolTipText</b>		

A yellow arrow points from the "text" property in the Properties window to the "Mens" component in the Design view.



# Java Swing – JLabel – Editor Texto

The screenshot shows an IDE with a file named 'Tela01.java'. The 'Design' tab is active, displaying a graphical user interface. The main window has a cyan background. Inside, there is a grey panel with two labels, both labeled 'Mens...'. A yellow arrow points from the second 'Mens...' label to the 'text' property in the 'jLabel3 [JLabel] - Properties' window. The 'Palette' window on the right shows 'Swing Containers' and 'Swing Controls'. The 'Swing Controls' section includes a 'Label' and a 'Button'.

**Swing Containers**

- Panel
- Split Pane
- Tool Bar
- Layered Pane
- Tabbed Pane
- Scroll Pane
- Internal Frame

**Swing Controls**

- label Label
- OK Button

**jLabel3 [JLabel] - Properties**

Properties	Events	Code
icon		<none>
labelFor		<none>
<b>text</b>		Mensagem 2:
toolTipText		



# Java Swing – JLabel – Aumentar Fonte

The image shows a Java Swing IDE interface with a yellow arrow pointing from a JLabel component in the design view to the 'jLabel1 [JLabel] - font' dialog box. The dialog box has a title bar with a close button. Inside, it says 'Set **jLabel1**'s font property using: Default editor'. There is a checkbox 'Derive the font from the default font' which is unchecked. Below this are three columns: 'Font:', 'Font Style:', and 'Size:'. The 'Font:' column has a list with 'Segoe UI' selected. The 'Font Style:' column has a list with 'Plain' selected. The 'Size:' column has a list with '24' selected. At the bottom of the dialog is a 'Preview' section with the text 'The quick brown fox jumps over the lazy dog'. Below the preview are three buttons: 'OK', 'Cancel', and 'Help'. A yellow arrow points from the 'OK' button to the 'jLabel1 [JLabel] - Properties' panel on the right. This panel has tabs for 'Properties', 'Events', and 'Code'. The 'Properties' tab is active, showing a table of properties. The 'font' property is highlighted in blue, and its value is 'Segoe UI 12 Plain'. A yellow arrow points from the 'font' property value to the 'font' property in the 'jLabel1 [JLabel] - font' dialog box.

**jLabel1 [JLabel] - font**

Set **jLabel1**'s font property using: Default editor

☐ Derive the font from the default font

Font:	Font Style:	Size:
Segoe UI	Plain	24
Segoe Print	Plain	14
Segoe Script	Bold	18
Segoe UI	Italic	24
Segoe UI Black	Bold Italic	36

Preview  
The quick brown fox jumps over the lazy dog

OK Cancel Help

**jLabel1 [JLabel] - Properties**

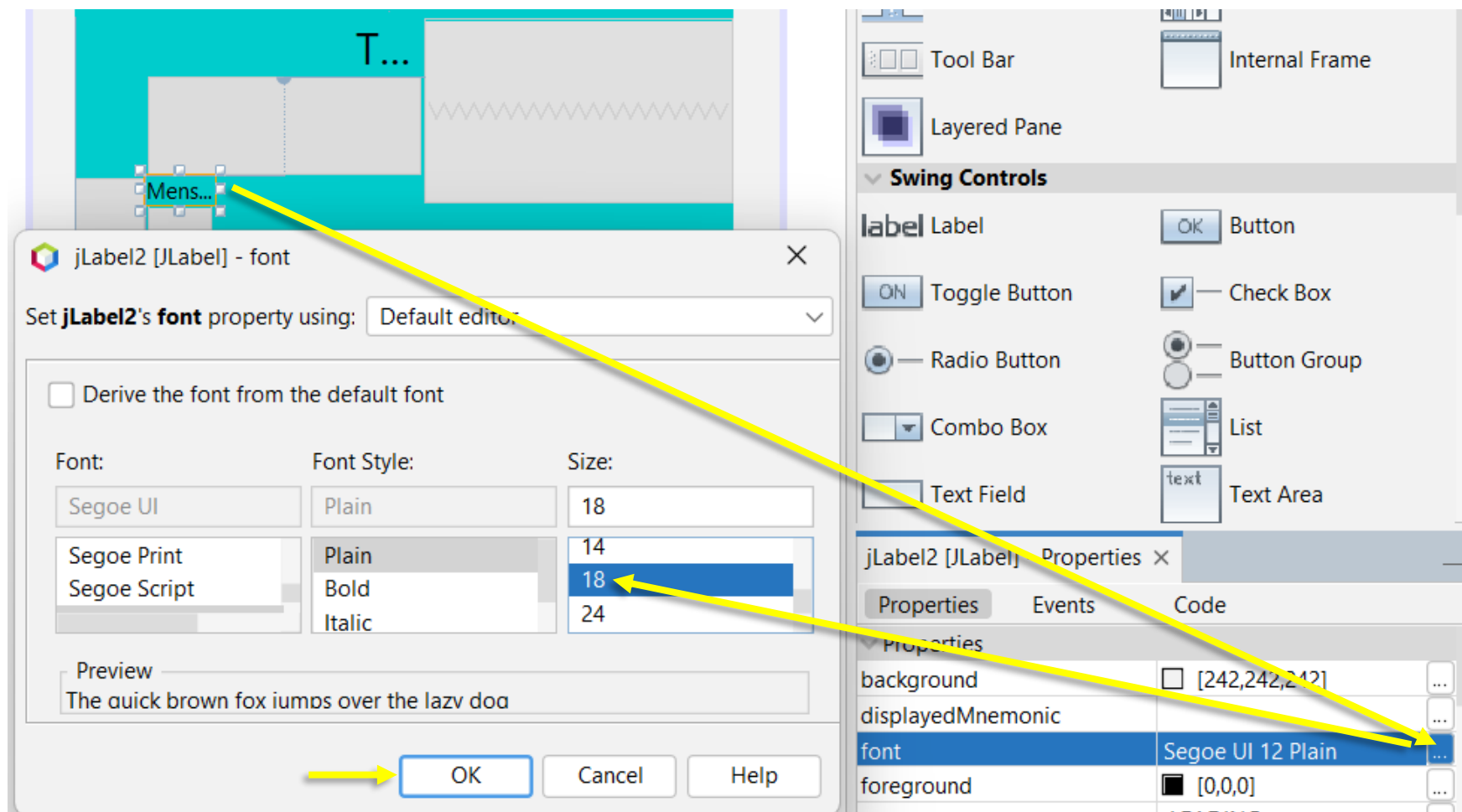
Properties Events Code

Properties

background	[242,242,242]
displayedMnemonic	
font	Segoe UI 12 Plain
foreground	[0,0,0]



# Java Swing – JLabel – Aumentar Fonte



# Java Swing – JLabel – Aumentar Fonte

The image shows a Java Swing IDE interface with two main windows. The top window is a preview of a JLabel component with the text "Mens...". Below it is a dialog box titled "jLabel3 [JLabel] - font". The dialog box has a dropdown menu set to "Default editor". It contains three sections: "Font:" with a list box showing "Segoe UI" and "Segoe Print"; "Font Style:" with a list box showing "Plain" and "Bold"; and "Size:" with a list box showing "18" and "24". A yellow arrow points from the "18" in the "Size:" list box to the "font" property in the "Properties" tab of the "jLabel3 [JLabel] - Properties" window. The "font" property is currently set to "Segoe UI 12 Plain". Another yellow arrow points from the "OK" button in the font dialog box to the "font" property in the properties window. The "Properties" tab also shows other properties like "background", "displayedMnemonic", "foreground", "horizontalAlignment", and "icon".

Font settings for JLabel3:

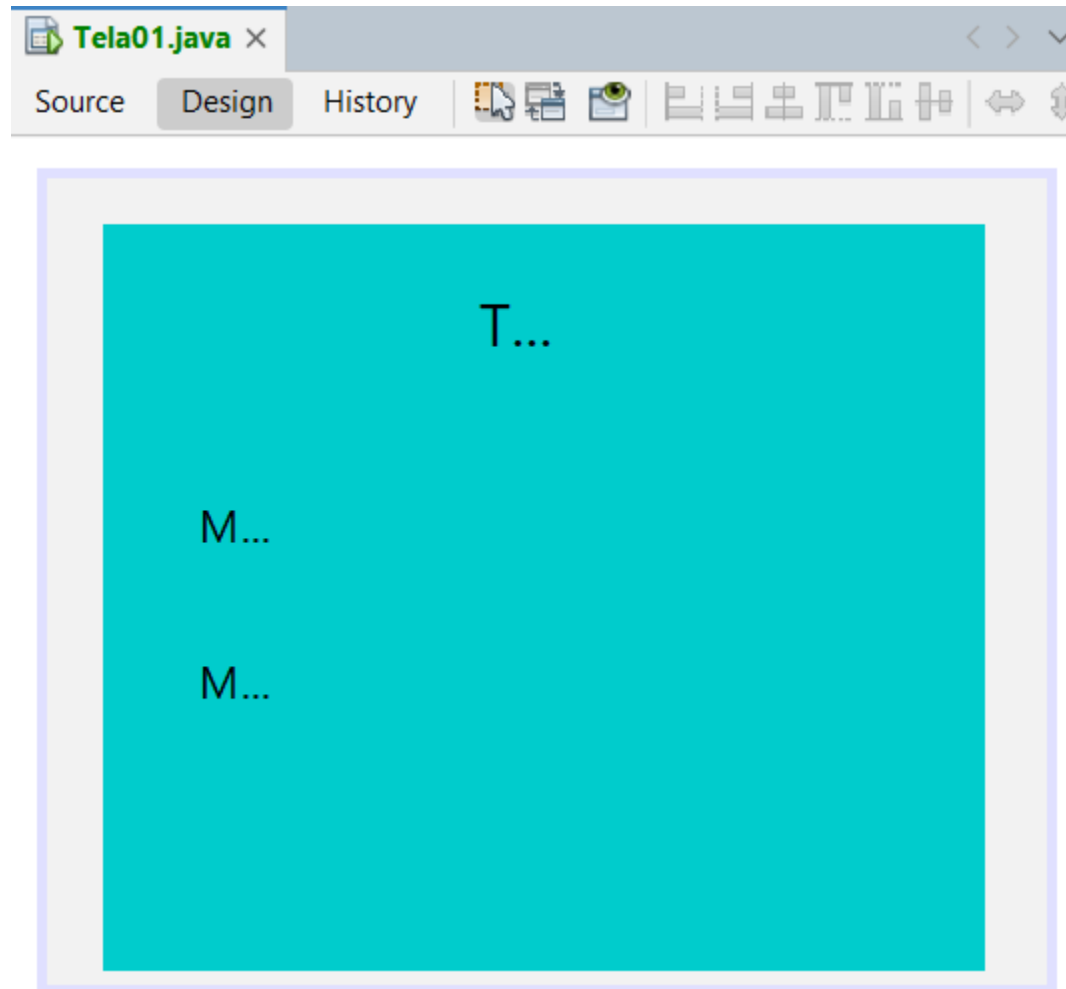
- Font: Segoe UI
- Font Style: Plain
- Size: 18

Properties for JLabel3 [JLabel]:

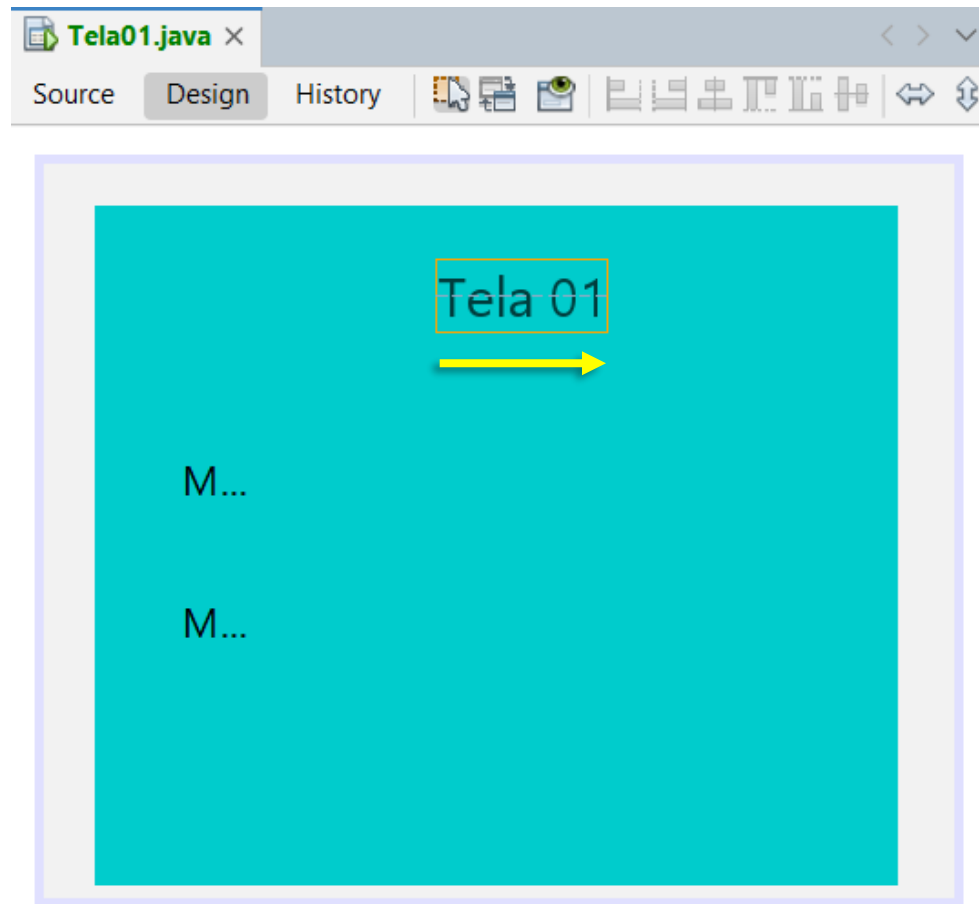
Property	Value
background	[242,242,242]
displayedMnemonic	
font	Segoe UI 12 Plain
foreground	[0,0,0]
horizontalAlignment	LEADING
icon	<none>



# Java Swing – JLabel – Aumentar Fonte

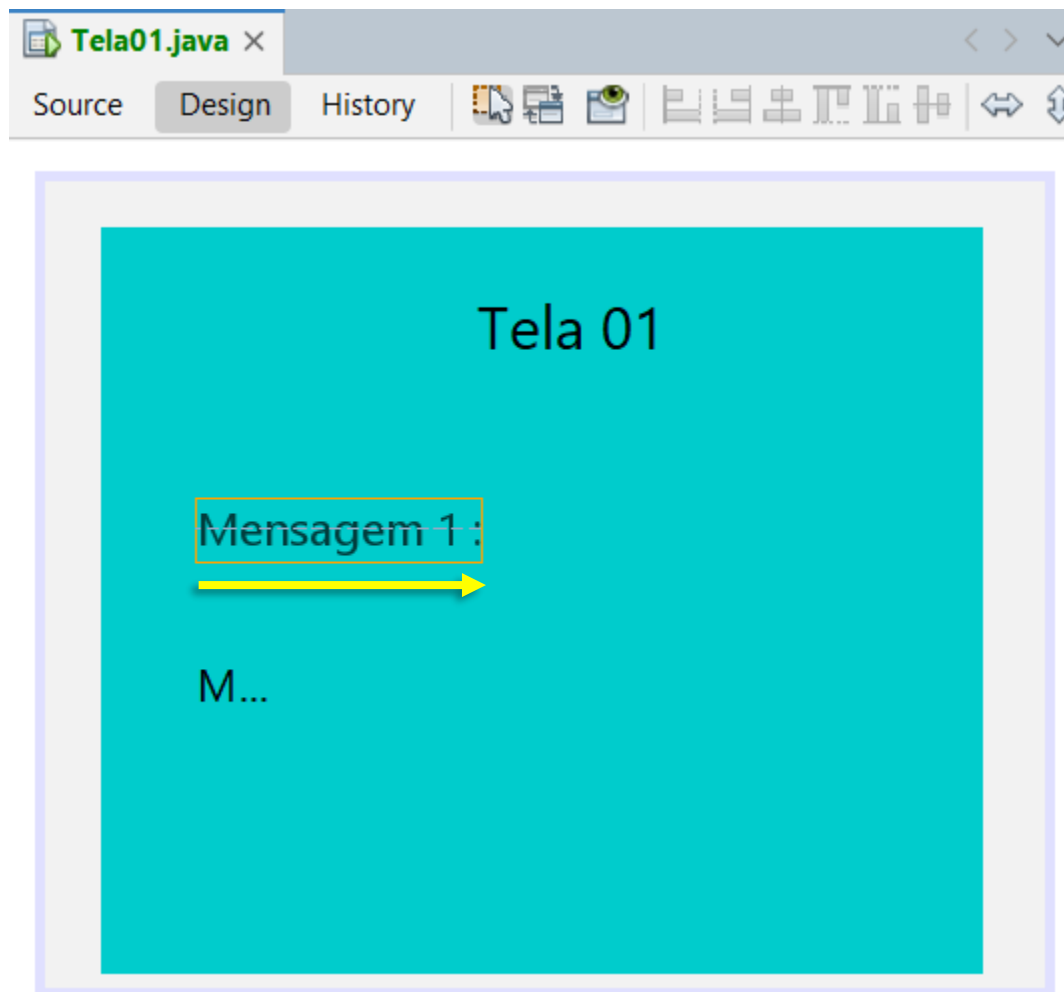


# Java Swing – JLabel – Redimensionar

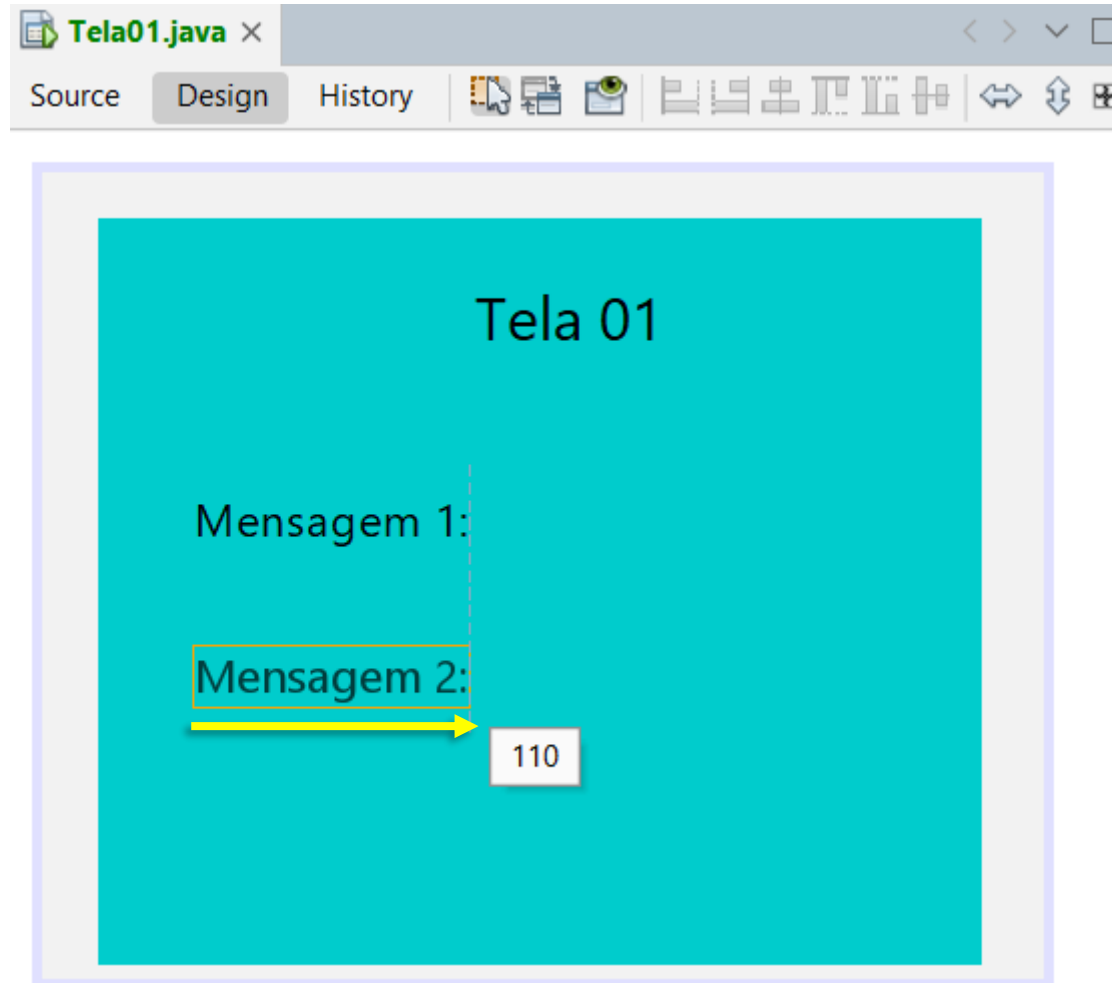




# Java Swing – JLabel – Redimensionar



# Java Swing – JLabel – Redimensionar



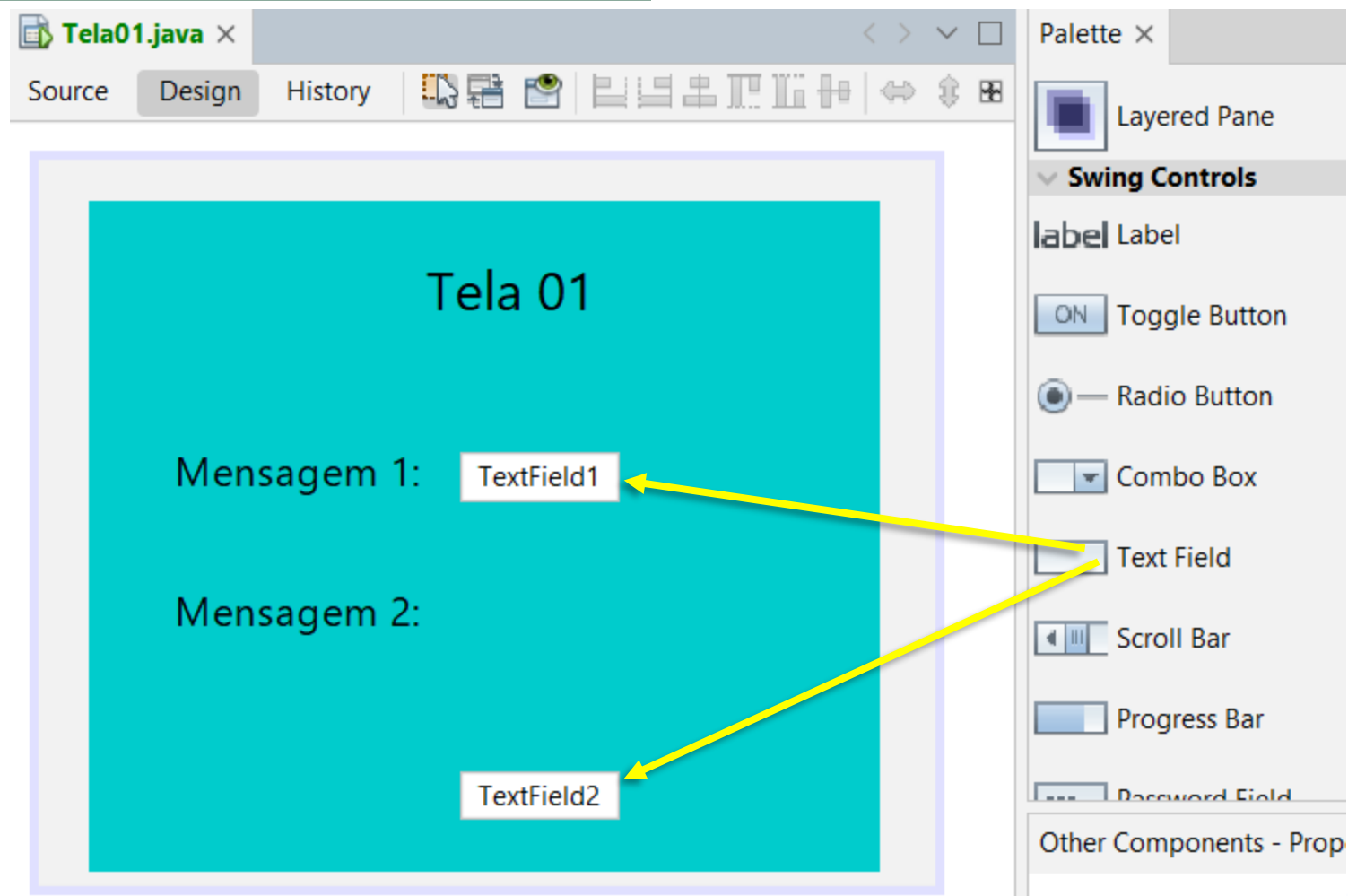
# Java Swing – JTextField

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- A classe **JTextField** permite criar uma **caixa de texto gráfica** na qual o usuário pode **digitar dados**.
- Existem **diversas propriedades** cujos **conteúdos podem ser modificados**.



# Java Swing – JTextField – Adicionar



# Java Swing – JTextField – Editor Texto

The screenshot displays an IDE window titled 'Tela01.java' with tabs for Source, Design, and History. The Design view shows a window titled 'Tela 01' with a cyan background. Inside, there are two labels: 'Mensagem 1:' and 'Mensagem 2:'. A text field, labeled 'TextField2' at its bottom, is positioned to the right of 'Mensagem 1:'. A yellow arrow points from the text field to the 'jTextField1 [JTextField] - Properties' panel on the right.

The 'jTextField1 [JTextField] - Properties' panel has three tabs: Properties, Events, and Code. The Properties tab is active, showing the following properties:

Property	Value	Action
foreground	[0,0,0]	...
horizontalAlignment	LEADING	...
text		...
toolTipText		...
Other Properties		
UI	<default>	...



# Java Swing – JTextField – Editor Texto

The screenshot shows an IDE window titled 'Tela01.java' with tabs for Source, Design, and History. The Design view displays a window titled 'Tela 01' with a cyan background. It contains two labels, 'Mensagem 1:' and 'Mensagem 2:', and a text field. A yellow arrow points from the text field to the 'text' property in the Properties window.

**Palette**

- Layered Pane
- Swing Controls**
  - Label
  - Toggle Button
  - Radio Button
  - Combo Box
  - Button
  - Check Box
  - Button Group
  - List

**jTextField2 [JTextField] - Properties**

Properties	Events	Code
foreground		[0,0,0]
horizontalAlignment		LEADING
text		
toolTipText		
<b>Other Properties</b>		
UI		<default>



# Java Swing – JTextField – Renomear Var.

Properties Events Code

Code Generation	
Bean Class	class javax.swing.JTextField
Variable Name	txtMensagem1
Variable Modifiers	private
Type Parameters	
Use Local Variable	<input type="checkbox"/>



# Java Swing – JTextField – Renomear Var.

The image shows a screenshot of an IDE interface. On the left, a window titled "Tela01.java" is in Design mode. It contains a cyan rectangular area labeled "Tela 01" with two labels, "Mensagem 1:" and "Mensagem 2:", each followed by a white text field. On the right, a "Palette" window shows "Swing Controls" including Label, Button, Toggle Button, Check Box, Radio Button, Button Group, Combo Box, and List. Below the palette, a "jTextField2 [JTextField] - Properties" window is open, showing the "Code" tab. A yellow arrow points from the text field in the design view to the "Variable Name" field in the properties window, which is set to "txtMensagemFinal".

**Swing Controls**

- Label
- Button
- Toggle Button
- Check Box
- Radio Button
- Button Group
- Combo Box
- List

**jTextField2 [JTextField] - Properties**

Properties Events Code

**Code Generation**

Bean Class	class javax.swing.JTextField
Variable Name	txtMensagemFinal
Variable Modifiers	private
Type Parameters	
Use Local Variable	<input type="checkbox"/>





# Java Swing – JTextField – Aument. Fonte

The image shows two windows from a Java Swing IDE. The left window is titled 'txtMensagem1 [JTextField] - font' and is used to configure the font for the selected component. It shows the font set to 'Segoe UI', style 'Plain', and size '18'. The right window is titled 'txtMensagem1 [JTextField] - Properties' and shows the 'font' property set to 'Segoe UI 12 Plain'. Yellow arrows indicate the relationship between the two windows and the specific property being modified.

**Font Configuration Dialog (Left):**

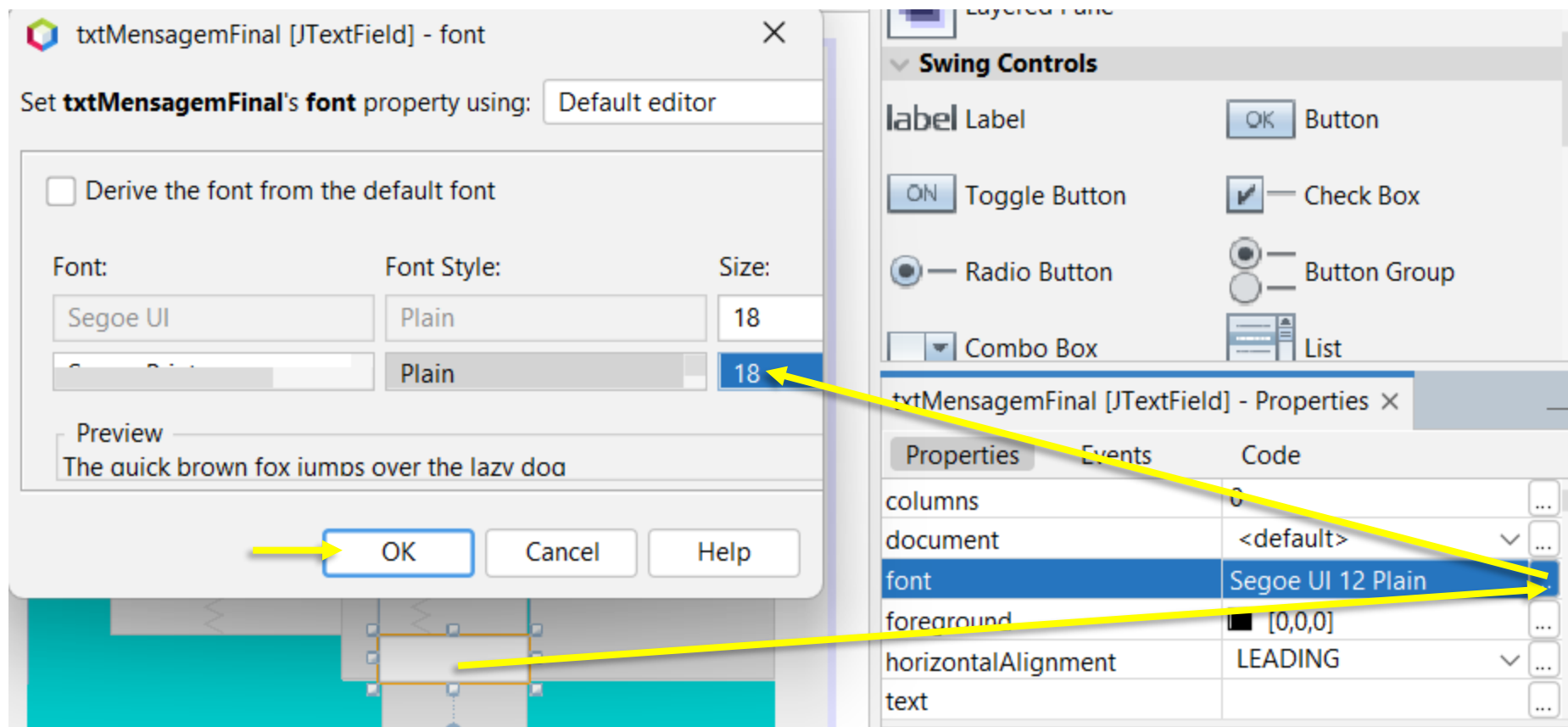
- Set **txtMensagem1**'s **font** property using: Default editor
- ☐ Derive the font from the default font
- Font: Segoe UI
- Font Style: Plain
- Size: 18
- Preview: The quick brown fox jumps over the lazy dog
- Buttons: OK, Cancel, Help

**Properties Window (Right):**

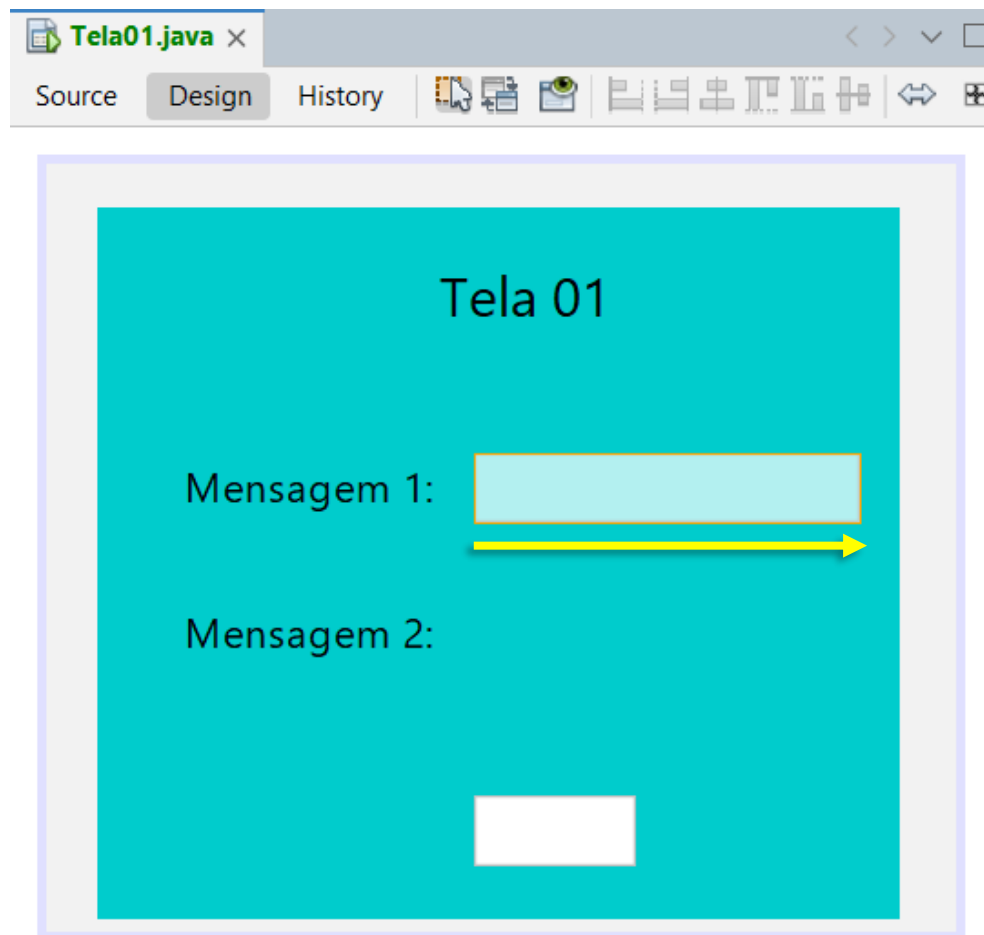
Property	Value
columns	0
document	<default>
font	Segoe UI 12 Plain
foreground	■ [0.0.0]
horizontalAlignment	LEADING
text	



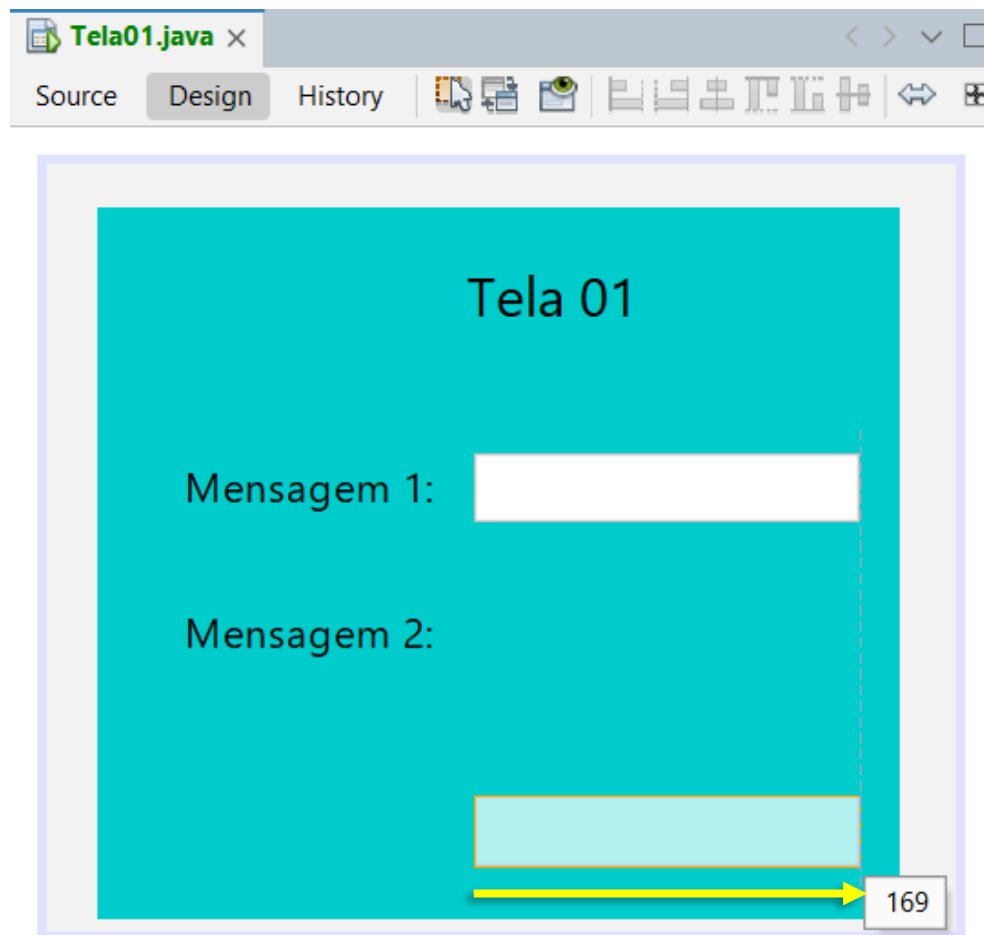
# Java Swing – JTextField – Aument. Fonte



# Java Swing – JTextField – Redimens.



# Java Swing – JTextField – Redimens.



# Java Swing – JTextField – Não Editável

The screenshot shows an IDE window titled 'Tela01.java' with tabs for Source, Design, and History. The Design view displays a window titled 'Tela 01' with a cyan background. It contains two labels, 'Mensagem 1:' and 'Mensagem 2:', each followed by a text field. The text field for 'Mensagem 2:' is highlighted with a yellow box. A yellow arrow points from this text field to the 'editable' property in the Properties panel, which is set to false.

Palette ×

- Radio Button
- Button Group
- Combo Box
- List
- Text Field
- Text Area
- Scroll Bar
- Slider
- Progress Bar
- Formatted Field
- Password Field
- Spinner
- Separator
- Text Pane

txtMensagemFinal [JTextField] - Properties ×

Properties	Events	Code
editable		<input type="checkbox"/>
background		<input type="checkbox"/> [242,242,242]
columns		0

editable



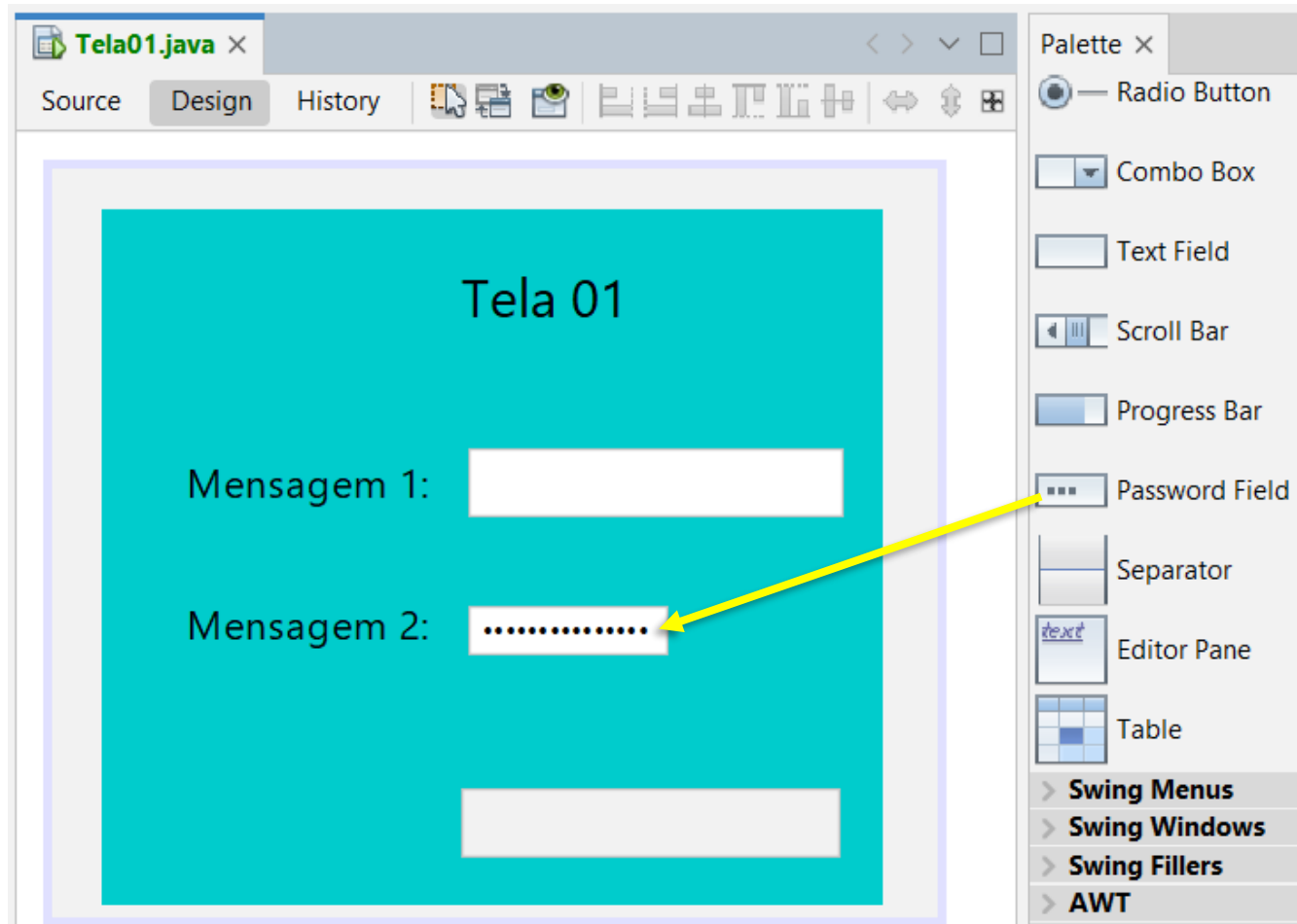
# Java Swing – JPasswordField

---

- A classe **JPasswordField** permite criar uma **caixa de texto gráfica** na qual o usuário pode **digitar dados**, porém eles são substituídos (visualmente) por outro caractere (\*).



# Java Swing – JPasswordField – Adic.



# Java Swing – JPasswordField – Editor T.

The screenshot displays the NetBeans IDE interface for a Java Swing application. The main window, titled "Tela 01", is in the Design view. It features a cyan background with two labels, "Mensagem 1:" and "Mensagem 2:", each followed by a text field. The second text field is a JPasswordField, highlighted by a yellow arrow pointing to its "toolTipText" property in the Properties window. The Properties window shows the "jPasswordField1 [JPasswordField]" component with properties like foreground, horizontalAlignment, text, and toolTipText. The Palette window on the right lists various Swing components like Radio Button, Combo Box, Text Field, Password Field, etc.





# Java Swing – JPasswordField – Ren. Var.

The screenshot shows an IDE window titled 'Tela01.java' with tabs for Source, Design, and History. The Design view displays a window titled 'Tela 01' with a cyan background. Inside the window, there are two labels: 'Mensagem 1:' and 'Mensagem 2:'. Below 'Mensagem 2:', there is a JPasswordField component. A yellow arrow points from the JPasswordField to the 'txpMensagem2 [JPasswordField] - Properties' window. The Properties window shows the 'Code' tab with the following information:

Code Generation	
Bean Class	class javax.swing.JPassword...
Variable Name	txpMensagem2
Variable Modifiers	private

Below the table, the text 'txpMensagem2 [JPasswordField]' is displayed.



# Java Swing – JPasswordField – Aum. F.

The image shows a Java Swing IDE with a window titled 'Tela01.java'. A dialog box titled 'txpMensagem2 [JPasswordField] - font' is open, allowing the user to set the font for the 'txpMensagem2' JPasswordField. The dialog has a 'Default editor' button and a checkbox 'Derive the font from the default font' which is unchecked. The 'Font' field is set to 'Segoe UI', 'Font Style' is 'Plain', and 'Size' is '18'. Below these fields are 'OK', 'Cancel', and 'Help' buttons. A yellow arrow points from the 'OK' button to the 'font' property in the 'txpMensagem2 [JPasswordField] - Properties' window. The 'Properties' window shows the 'font' property set to 'Segoe UI 12 Plain'. Another yellow arrow points from the 'font' property in the 'Properties' window to the 'font' field in the 'font' dialog box. The 'txpMensagem2 [JPasswordField]' component is visible in the background, showing a text field with the text 'Mensagem 2:'.

Font: Segoe UI Font Style: Plain Size: 18

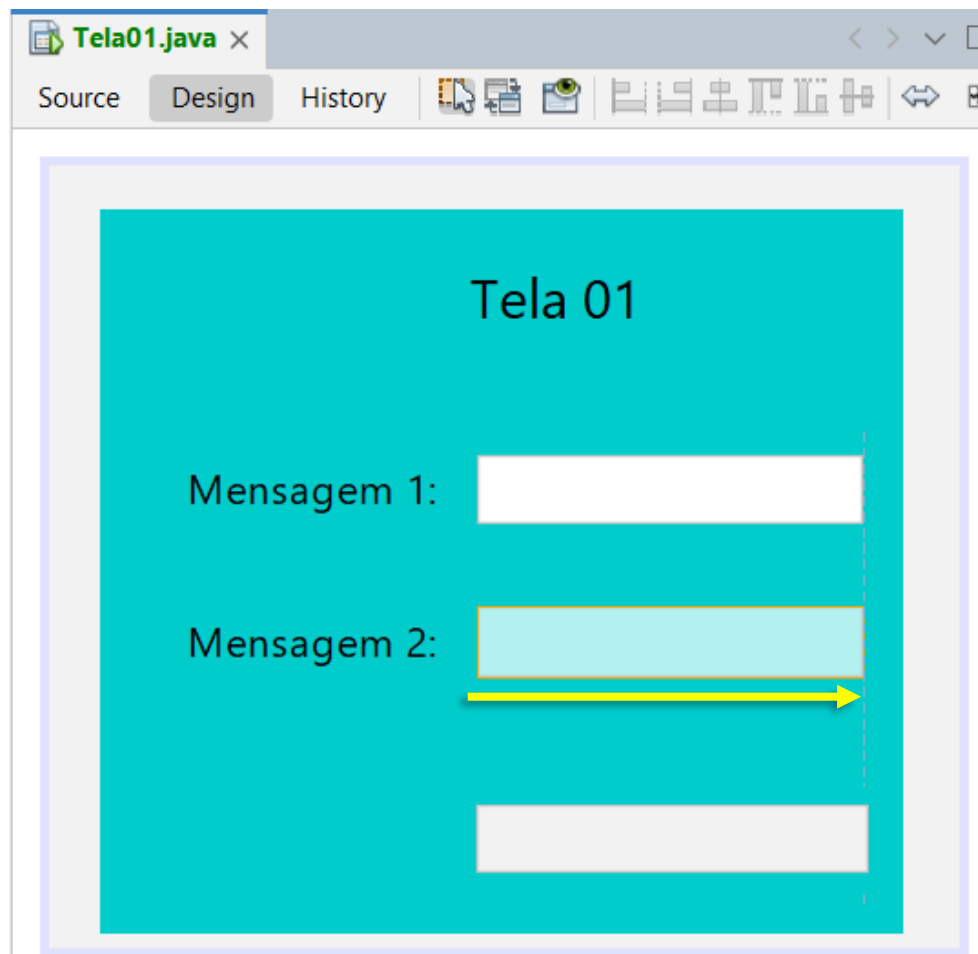
OK Cancel Help

txpMensagem2 [JPasswordField] - Properties

Properties	Events	Code
columns		0
document		<default>
font		Segoe UI 12 Plain
foreground		[0,0,0]



# Java Swing – JPasswordField – Redimen.



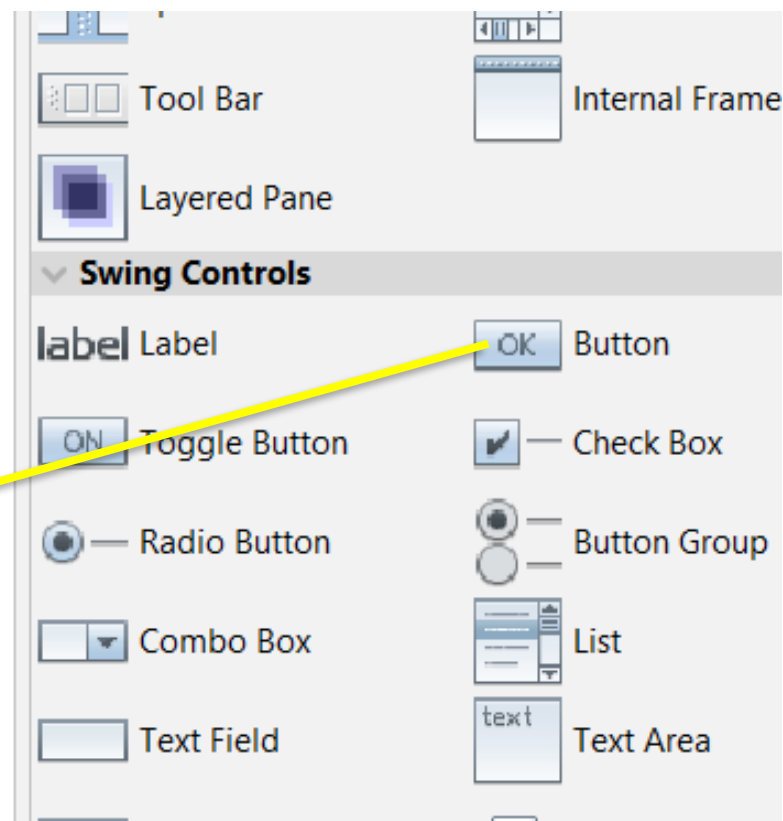
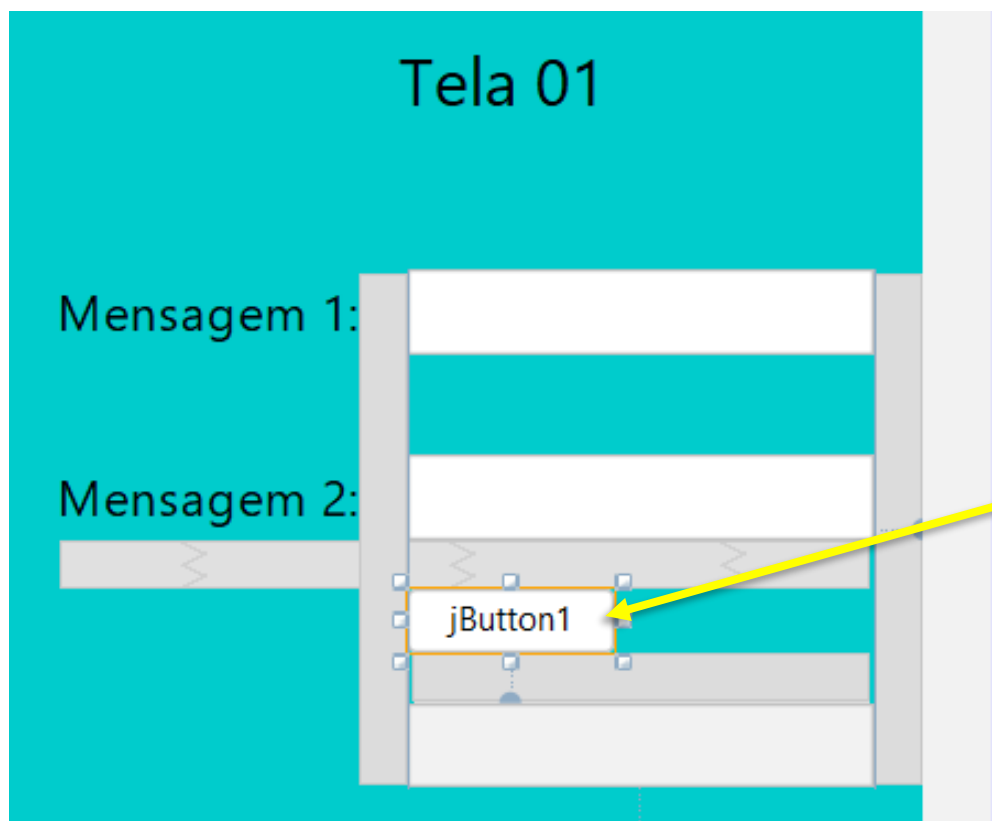
# Java Swing – JButton

---

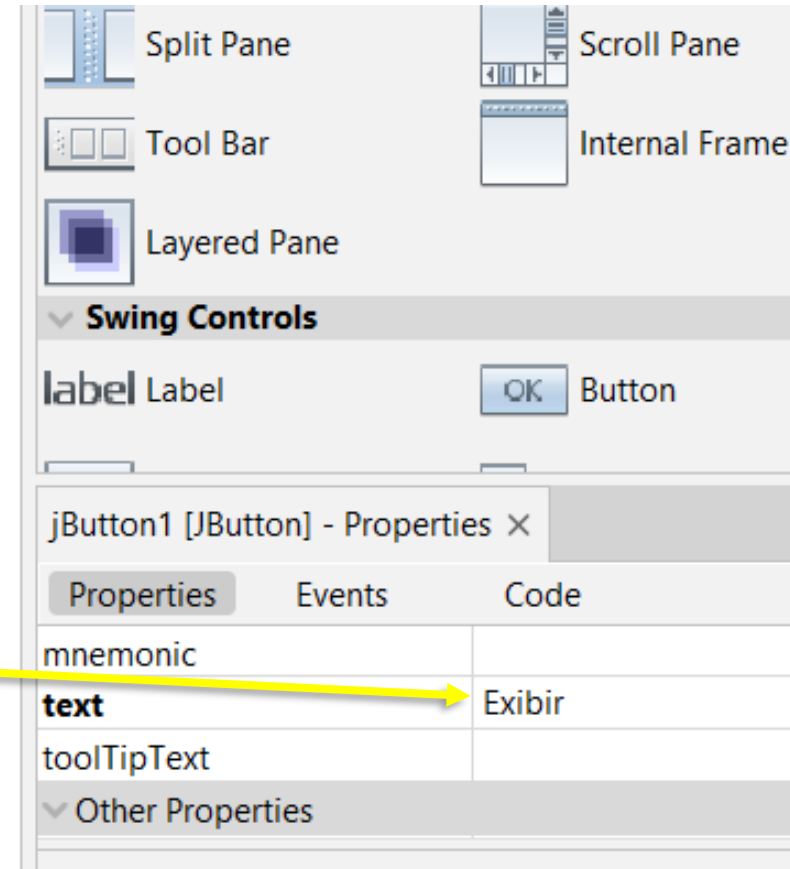
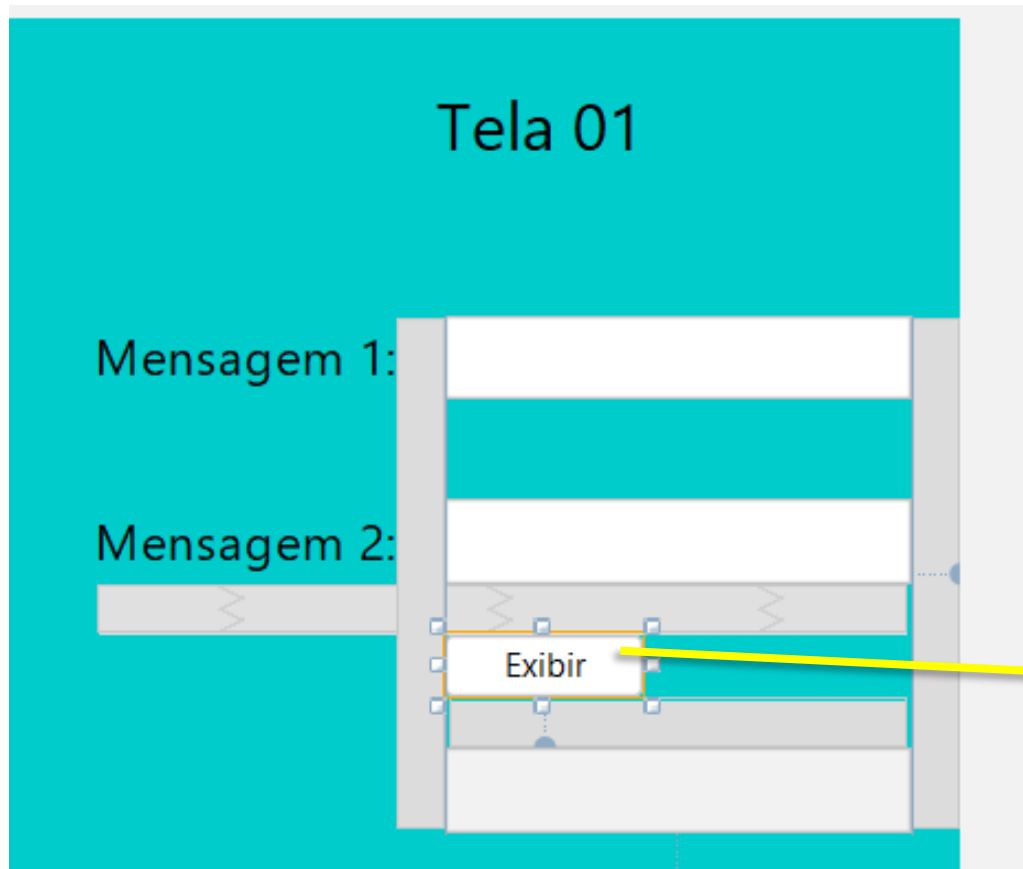
- A classe **JButton** permite **definir botões gráficos** que **pode ser adicionados** a um **outro componente** (frame, painel etc.).
- Um **botão** pode **ser criado** com apenas um **texto e/ou com ícones** para tornar o ambiente mais intuitivo.



# Java Swing – JButton – Adicionar



# Java Swing – JButton – Editor Texto



# Java Swing – JButton – Aumentar Fonte

The image shows a Java Swing IDE interface with two main windows. The left window, titled 'jButton1 [JButton] - font', is used to configure the font for a JButton. It has a 'Set jButton1's font property using:' dropdown set to 'Default editor'. Below this, there is a checkbox 'Derive the font from the default font' which is unchecked. The 'Font:' field is set to 'Segoe UI', 'Font Style:' is 'Plain', and 'Size:' is '18'. A 'Preview' section shows the text 'The quick brown fox jumps over the lazy dog' in the selected font. At the bottom are 'OK', 'Cancel', and 'Help' buttons. A yellow arrow points from the 'OK' button to the 'font' property in the right window. The right window, titled 'jButton1 [JButton] - Properties', shows a tree view of Swing Containers and Controls. Under 'Swing Controls', the 'font' property is highlighted, and its value is 'Segoe UI 12 Plain'. A yellow arrow points from the 'font' property in the right window to the 'font' property in the left window's preview section.

Set **jButton1**'s font property using: Default editor

☐ Derive the font from the default font

Font: Segoe UI Font Style: Plain Size: 18

Preview  
The quick brown fox jumps over the lazy dog

OK Cancel Help

Swing Containers

- Panel
- Split Pane
- Tool Bar
- Layered Pane
- Tabbed Pane
- Scroll Pane
- Internal Frame

Swing Controls

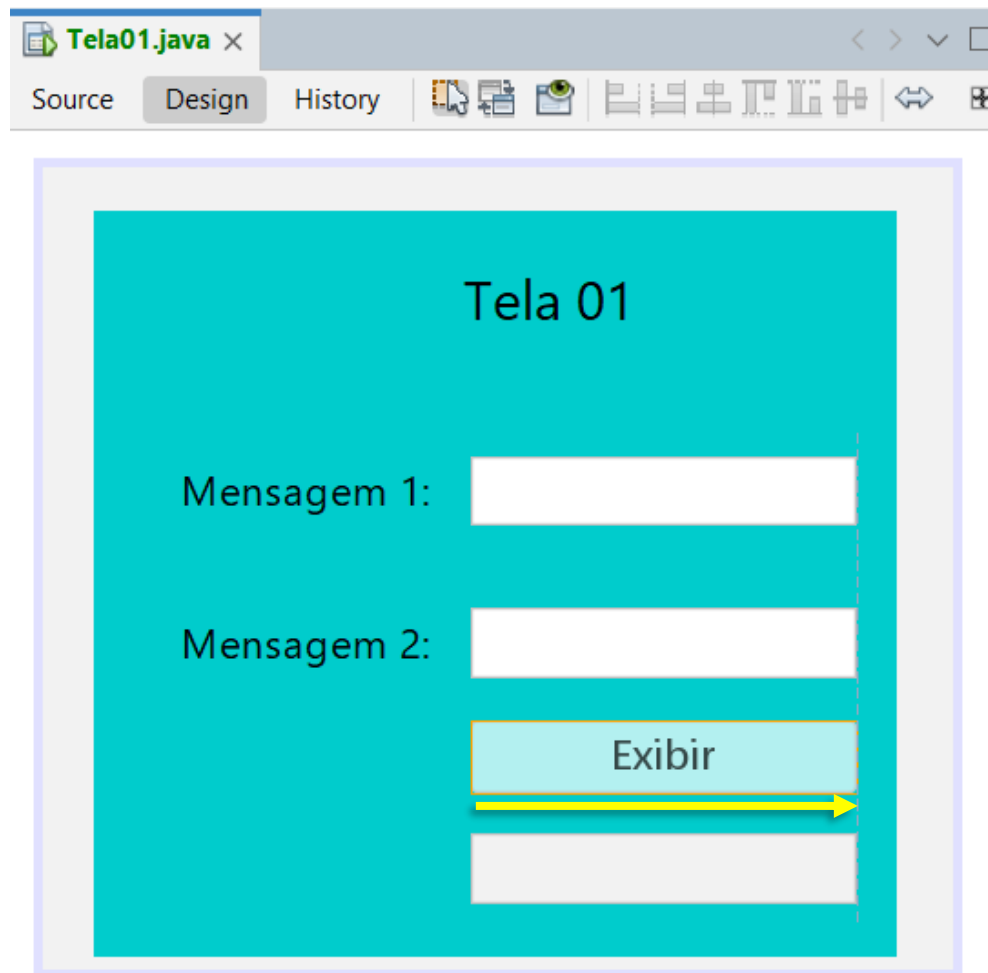
- Label
- Button

jButton1 [JButton] - Properties

Properties	Events	Code
font		Segoe UI 12 Plain
foreground		[0,0,0]
icon		<none>



# Java Swing – JButton – Redimensionar





# Java Swing – JButton – Renomear Var.

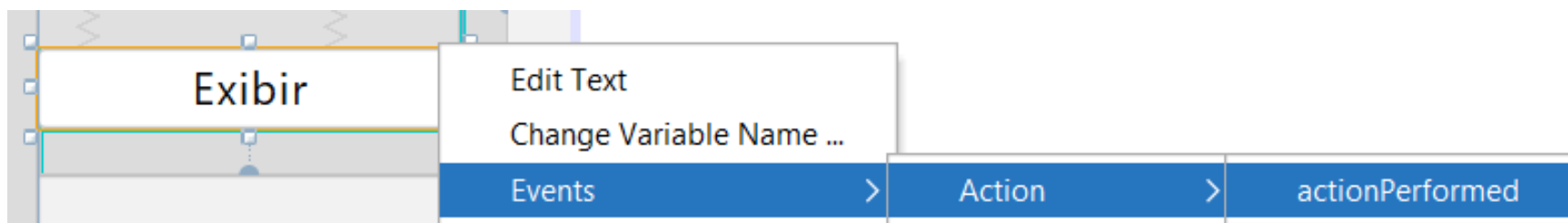
The image shows a Java Swing IDE interface. The main window, titled 'Tela 01', is in Design view. It contains a cyan background with the text 'Tela 01'. Below this, there are two labels: 'Mensagem 1:' and 'Mensagem 2:'. To the right of these labels is a vertical stack of components. The bottom component is a JButton labeled 'Exibir'. A yellow arrow points from the 'Exibir' button to the 'Properties' window.

The 'Properties' window for 'btnExibir [JButton]' is open. It shows the 'Code' tab. The 'Code Generation' section displays the following information:

Property	Value
Bean Class	class javax.swing.JButton
Variable Name	btnExibir
Variable Modifiers	private



# Java Swing – JButton – Adicionar Ação



# Java Swing – JButton – Adicionar Ação

```
private void btnExibirActionPerformed(java.awt.event.ActionEvent evt) {
```

# Java Swing – JButton – Adicionar Ação

---

```
import javax.swing.JOptionPane;
```



# Java Swing – JButton – Adicionar Ação

```
private void btnExibirActionPerformed(java.awt.event.ActionEvent evt) {  
  
    String mensagem1 = txtMensagem1.getText();  
    String mensagem2 = String.valueOf(txpMensagem2.getPassword());  
  
    String mensagemFinal = mensagem1 + " " + mensagem2;  
  
    txtMensagemFinal.setText(mensagemFinal);  
  
    JOptionPane.showMessageDialog(this, mensagemFinal);  
  
}
```



# Java Swing – JButton – Execução



Sistema IFBA

Tela 01

Mensagem 1:

Mensagem 2:



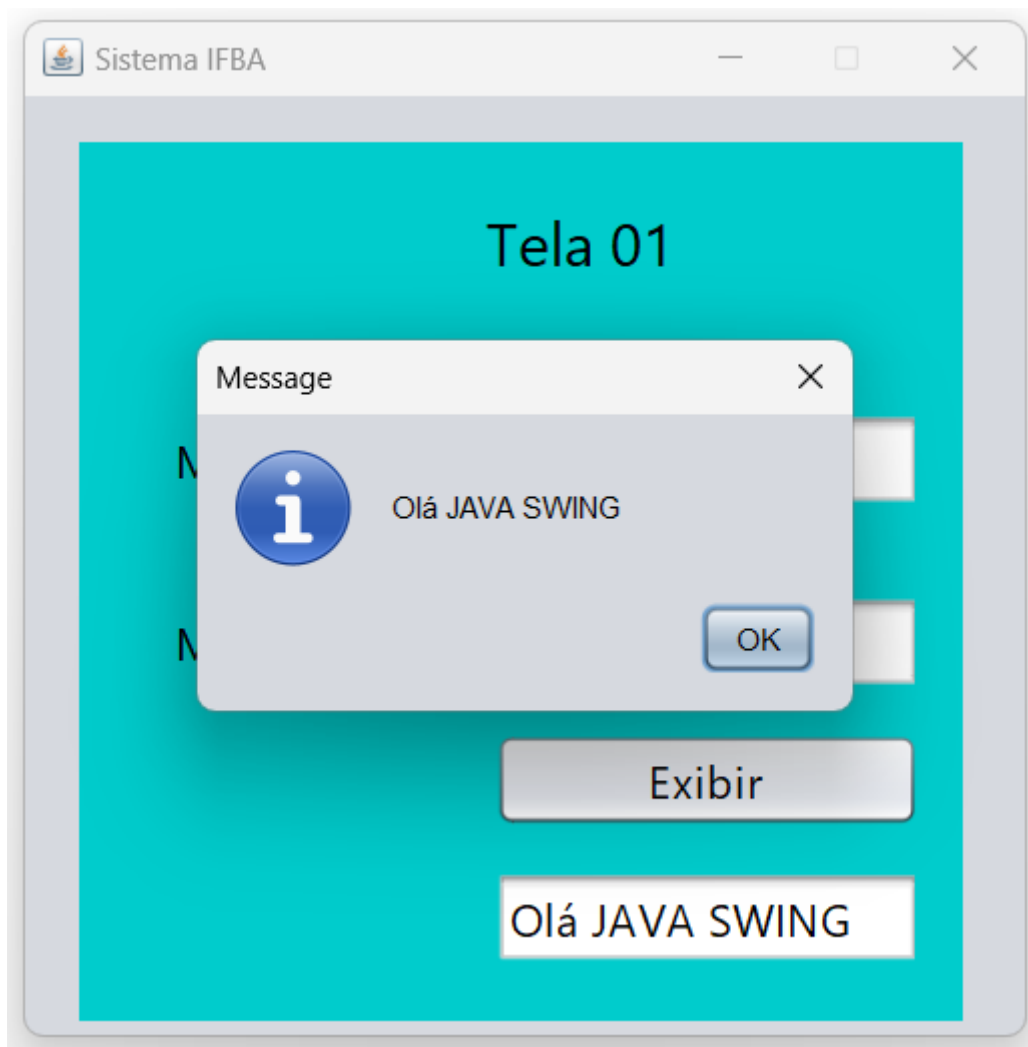
# Java Swing – JButton – Execução



The screenshot shows a Java Swing window titled "Sistema IFBA". The window has a light gray title bar with standard minimize, maximize, and close buttons. The main content area has a cyan background. At the top center, the text "Tela 01" is displayed. Below this, there are two text input fields. The first field is labeled "Mensagem 1:" and contains the text "Olá". The second field is labeled "Mensagem 2:" and contains a series of asterisks "\*\*\*\*\*". Below the second field is a button labeled "Exibir". At the bottom of the cyan area, there is an empty text input field.



# Java Swing – JButton – Execução





# Java Swing – JButton – Execução



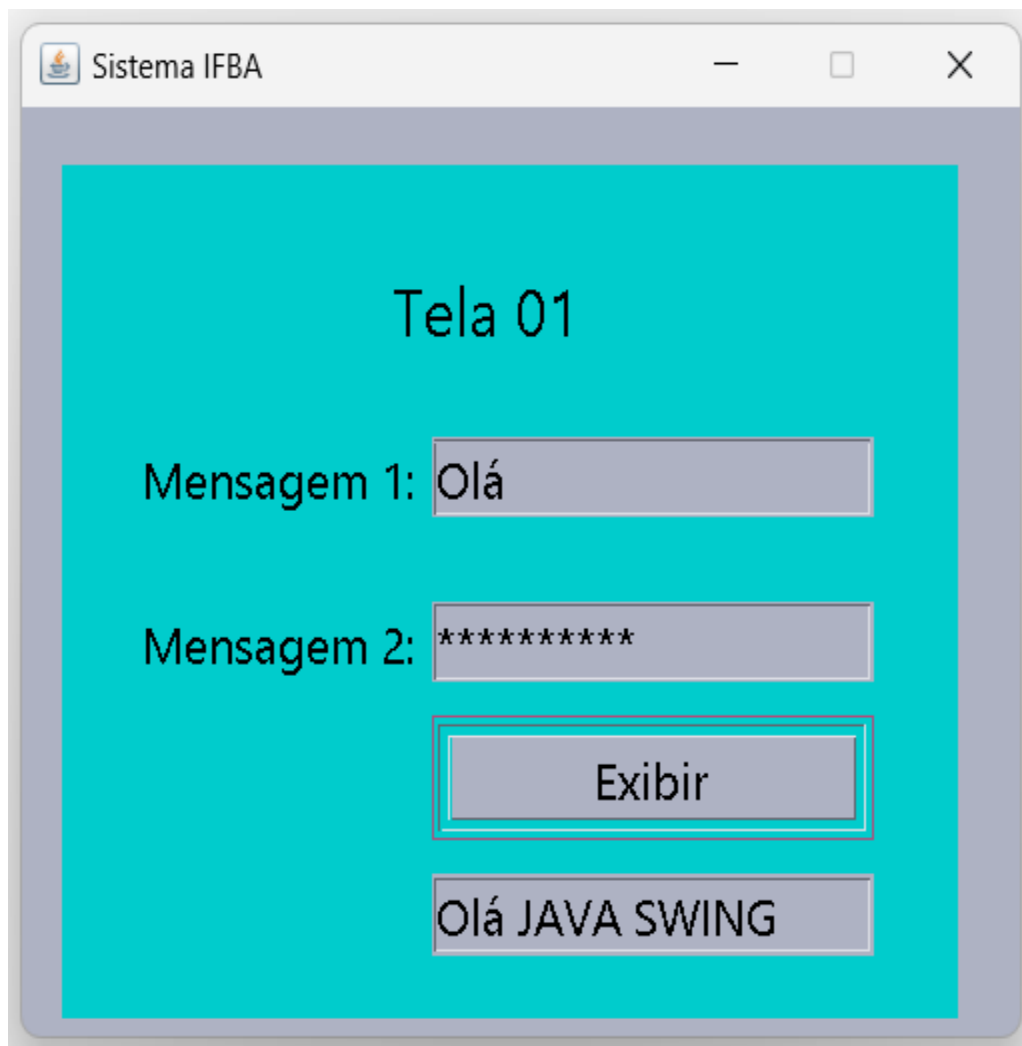
# Java Swing – Troca de Tema (Aparência)

```
if ("Nimbus".equals(info.getName())) {  
    javax.swing.UIManager.setLookAndFeel(info.getClassName());  
    break;  
}
```

```
if ("CDE/Motif".equals(info.getName())) {  
    javax.swing.UIManager.setLookAndFeel(info.getClassName());  
    break;  
}
```



# Java Swing – Troca de Tema (Aparência)

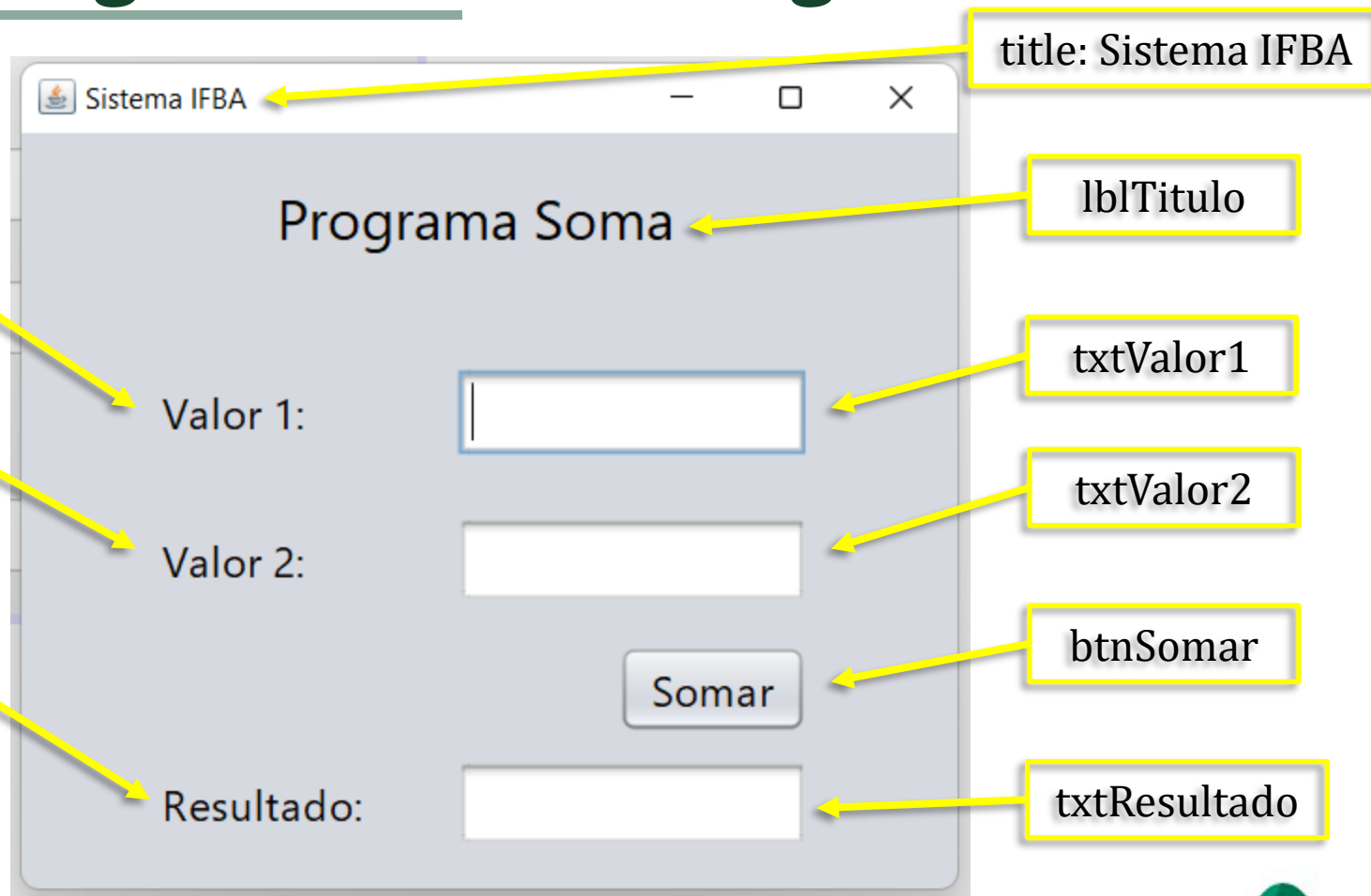


# Java Swing – Lista de Tema (Aparência)

1. Nimbus
2. Metal
3. CDE/Motif (também conhecido como Motif)
4. Windows
5. Windows Classic
6. GTK (disponível apenas em sistemas Linux)
7. Aqua (disponível apenas em sistemas macOS)
8. Synth
9. Mac
10. Mac OS X
11. Ocean
12. Plastic
13. System



# Java Swing – Exercício – Prog. Soma



TelaSoma.java



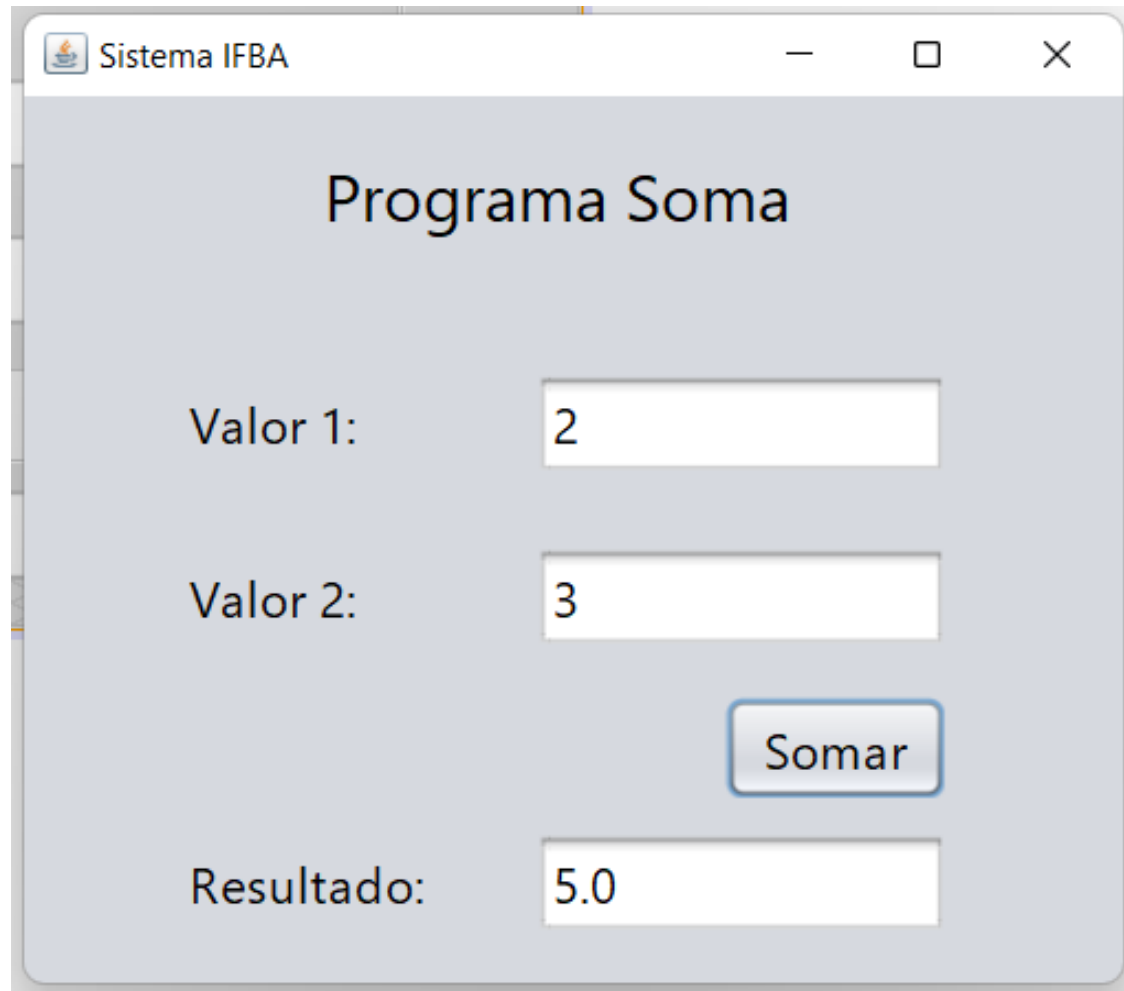
# Java Swing – Exercício – Prog. Soma

```
private void btnSomarActionPerformed(java.awt.event.ActionEvent evt) {  
  
    double valor1 = Double.parseDouble(txtValor1.getText());  
  
    double valor2 = Double.parseDouble(txtValor2.getText());  
  
    double resultado = valor1 + valor2;  
  
    String strResultado = String.valueOf(resultado);  
  
    txtResultado.setText(strResultado);  
  
}
```



# Java Swing – Exercício – Prog. Soma

Execução



Sistema IFBA

## Programa Soma

Valor 1: 2

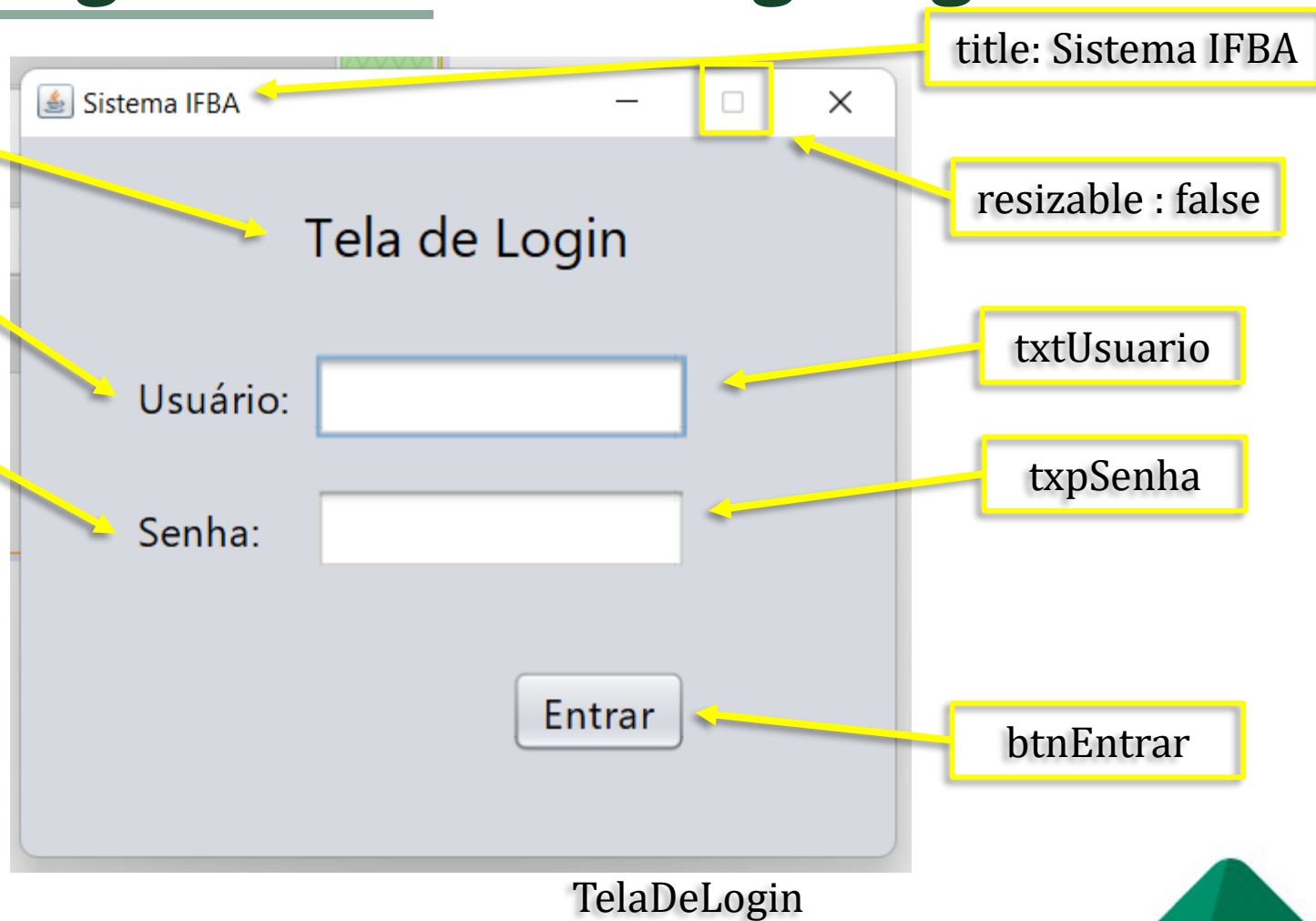
Valor 2: 3

Somar

Resultado: 5.0

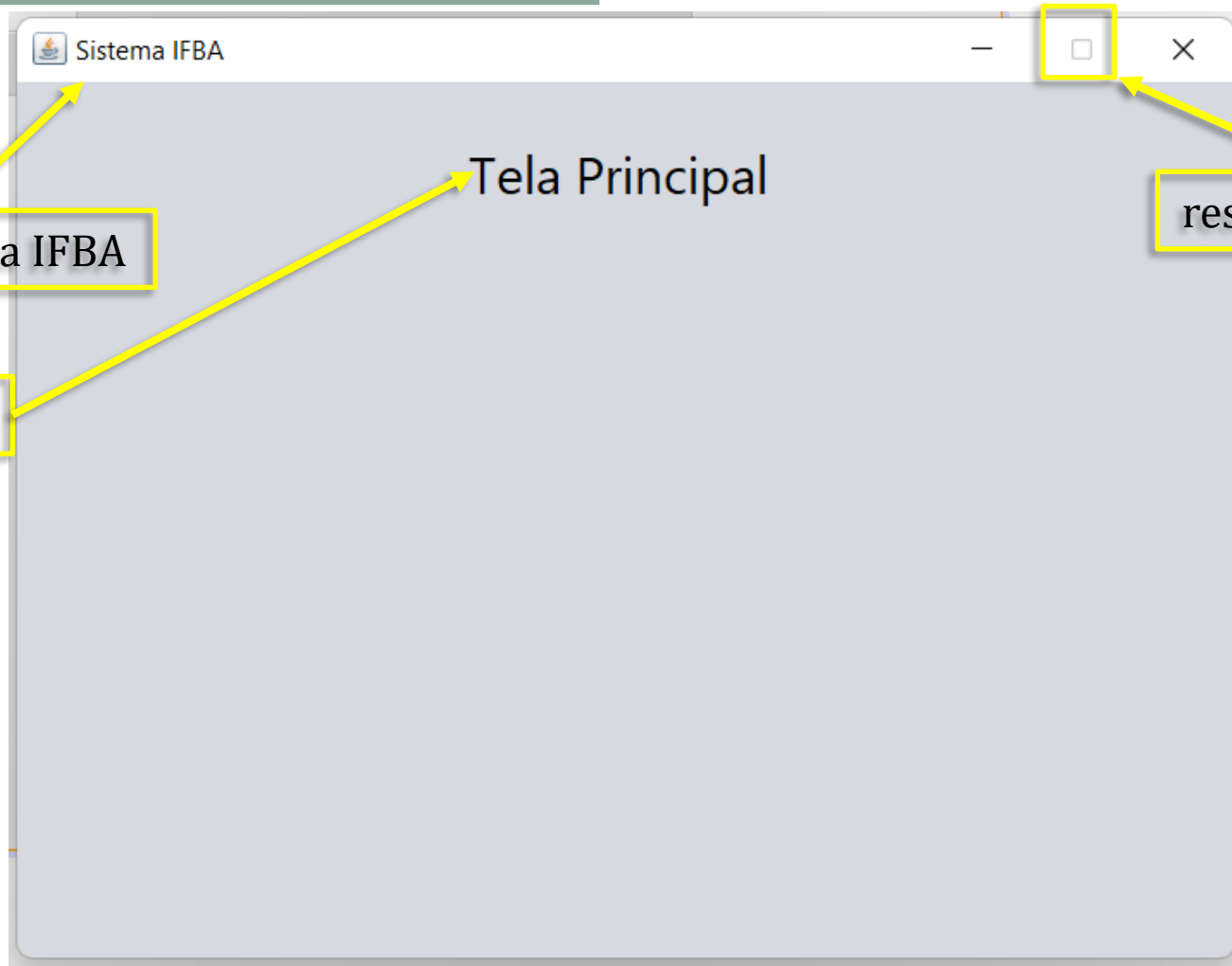


# Java Swing – Exercício – Prog. Login





# Java Swing – Exercício – Prog. Principal



TelaPrincipal



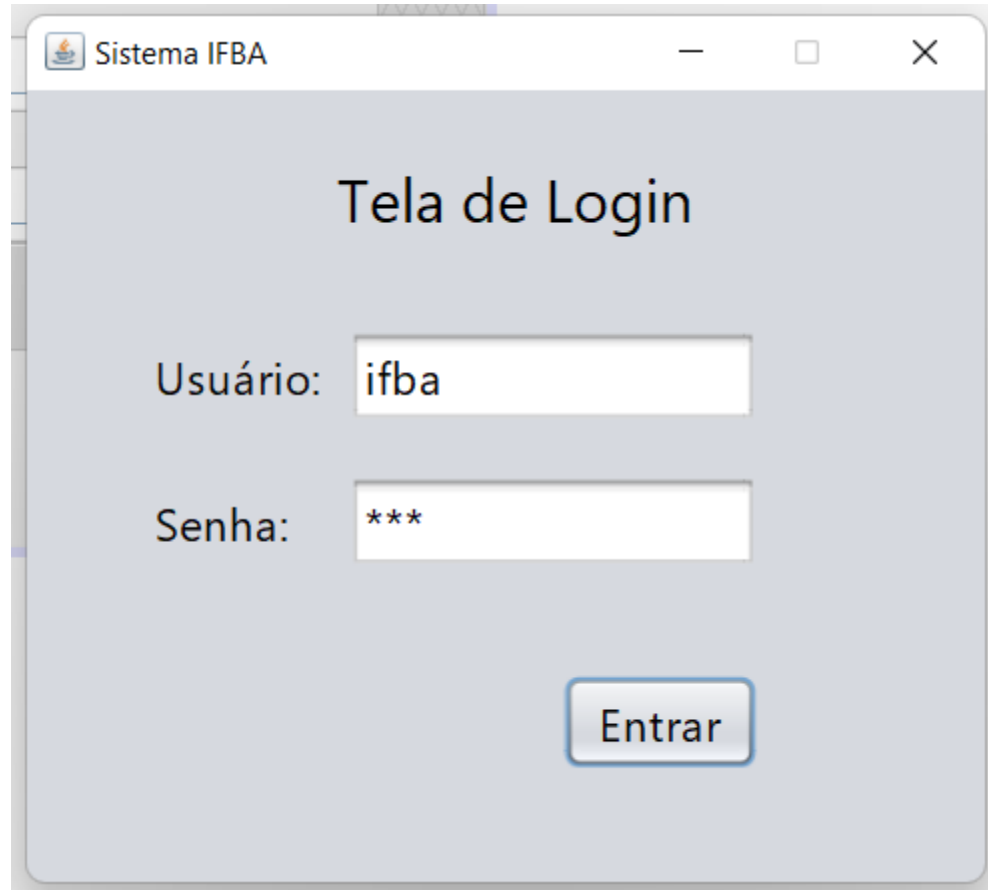
# Java Swing – Exercício – Prog. Login

```
private void btnEntrarActionPerformed(java.awt.event.ActionEvent evt) {  
  
    String usuario = txtUsuario.getText();  
  
    String senha = String.valueOf(txpSenha.getPassword());  
  
    if(usuario.equals("ifba") && senha.equals("1234"))  
    {  
        new TelaPrincipal().setVisible(true);  
  
        this.dispose();  
    }  
    else  
    {  
        JOptionPane.showMessageDialog(this, "Acesso negado!");  
    }  
}
```



# Java Swing – Exercício – Prog. Login

Execução

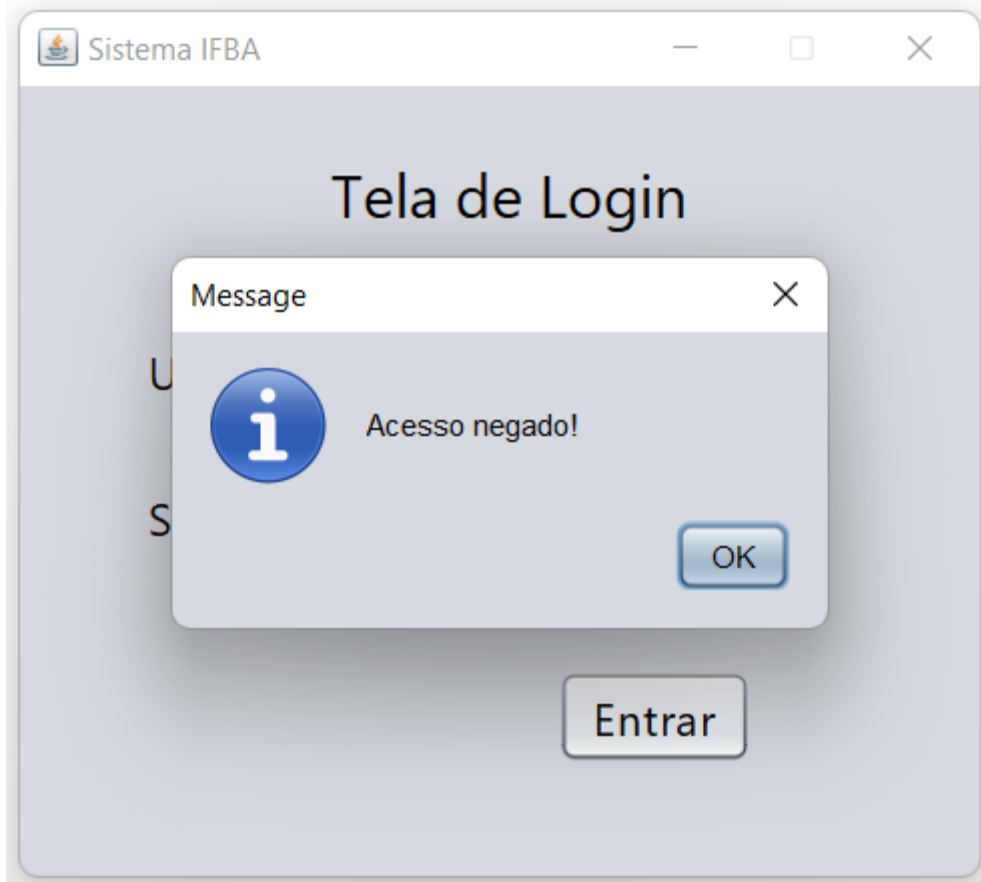


The screenshot shows a Java Swing window titled "Sistema IFBA". Inside the window, the text "Tela de Login" is centered. Below this, there are two input fields. The first is labeled "Usuário:" and contains the text "ifba". The second is labeled "Senha:" and contains three asterisks "\*\*\*". At the bottom right of the window, there is a button labeled "Entrar".



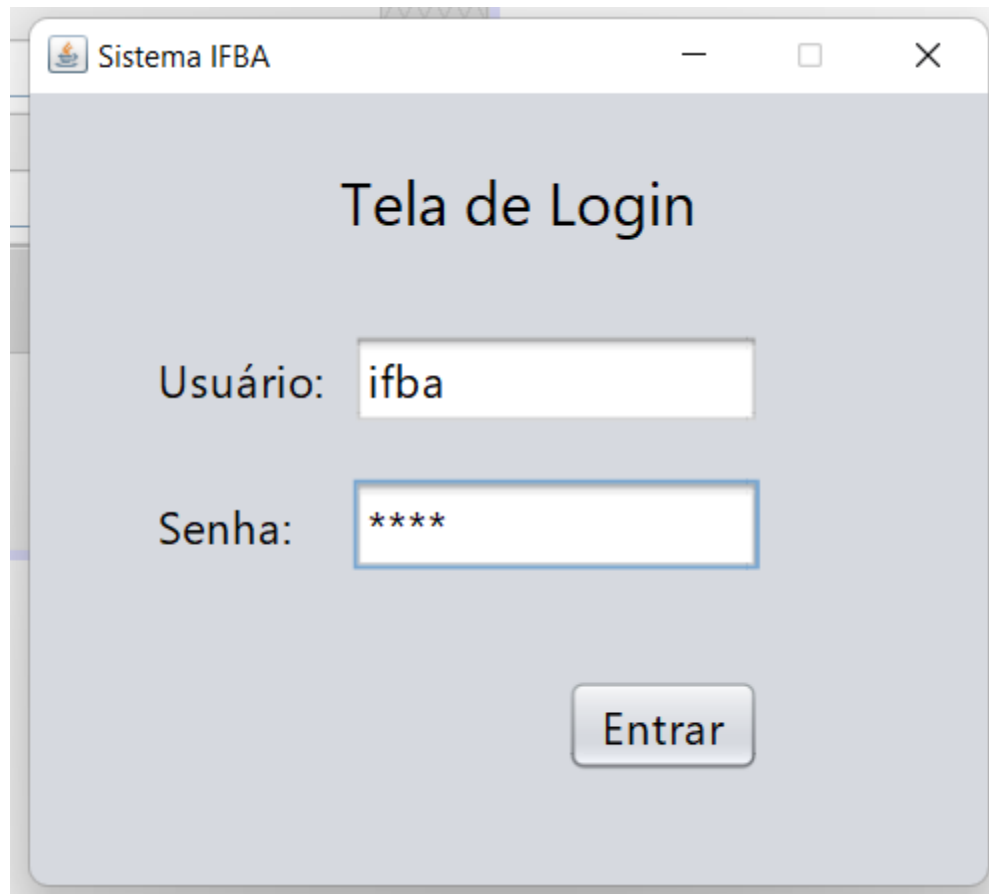
# Java Swing – Exercício – Prog. Login

Execução



# Java Swing – Exercício – Prog. Login

Execução

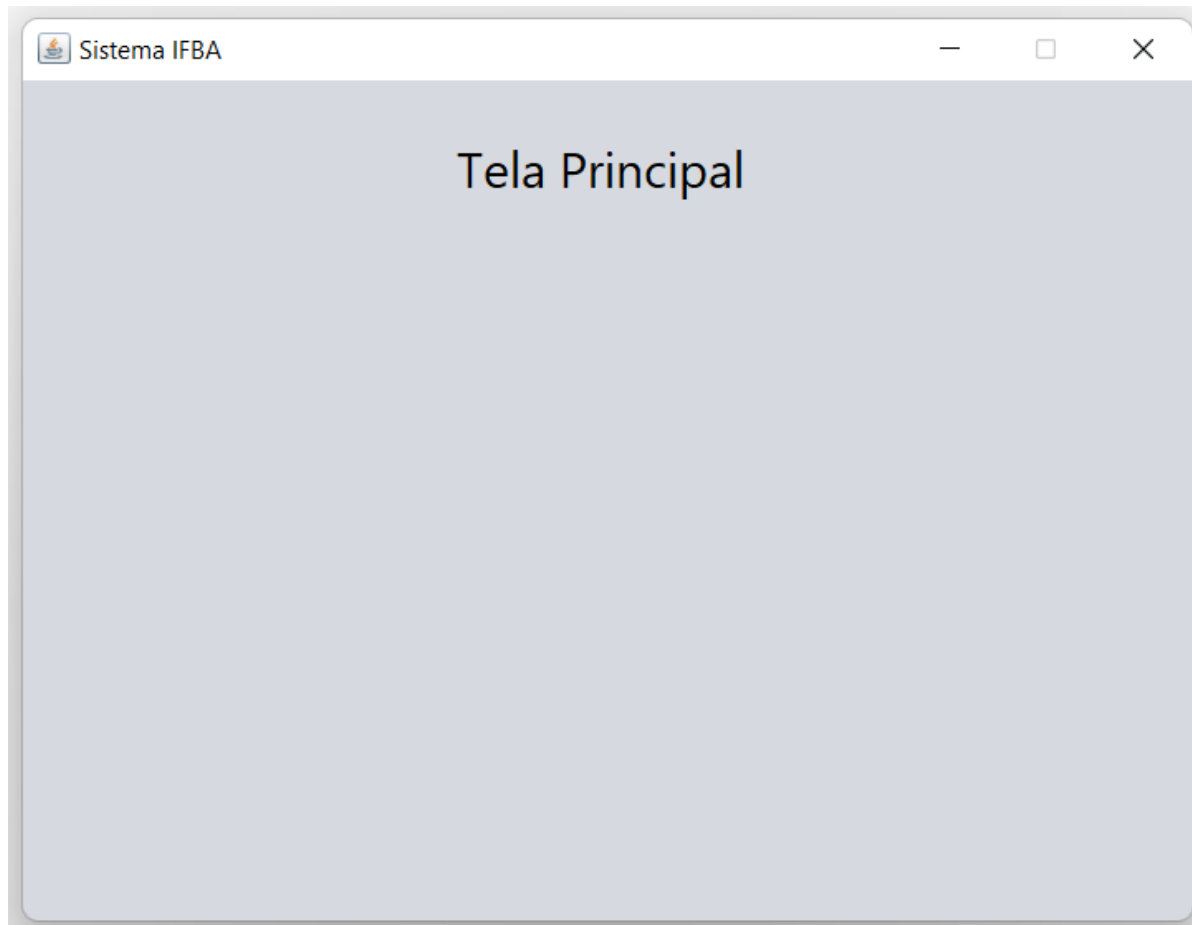


The screenshot shows a Java Swing window titled "Sistema IFBA". Inside the window, the text "Tela de Login" is centered. Below this, there are two input fields. The first is labeled "Usuário:" and contains the text "ifba". The second is labeled "Senha:" and contains four asterisks "\*\*\*\*". Below the input fields is a button labeled "Entrar".



# Java Swing – Exercício – Prog. Login

Execução



# Referências

- Junior, Peter Jandl. Java Guia do Programador - 4ª Edição. Novatec Editora.
- SÉRGIO FURGERI. Java Ensino Didático: Desenvolvimento e Implementação de Aplicações. Editora Érica.
- <https://www.youtube.com/playlist?list=PLwQkYMetu0OYFOU71txhtvSYTVUCHjJYD>
- [https://www.youtube.com/playlist?list=PLWd\\_VnthxxLfeEUK08gB7G3316OS5xIT3](https://www.youtube.com/playlist?list=PLWd_VnthxxLfeEUK08gB7G3316OS5xIT3)



# Obrigado!

- Canais de Comunicação;
- Horário de Atendimento.

