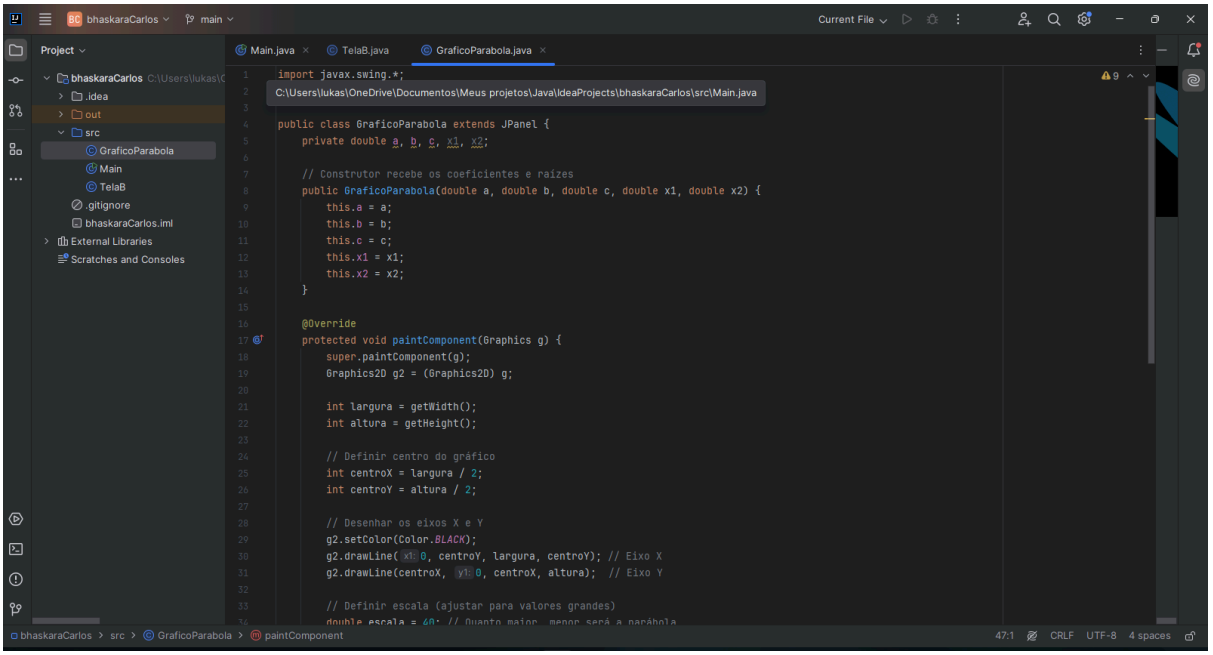
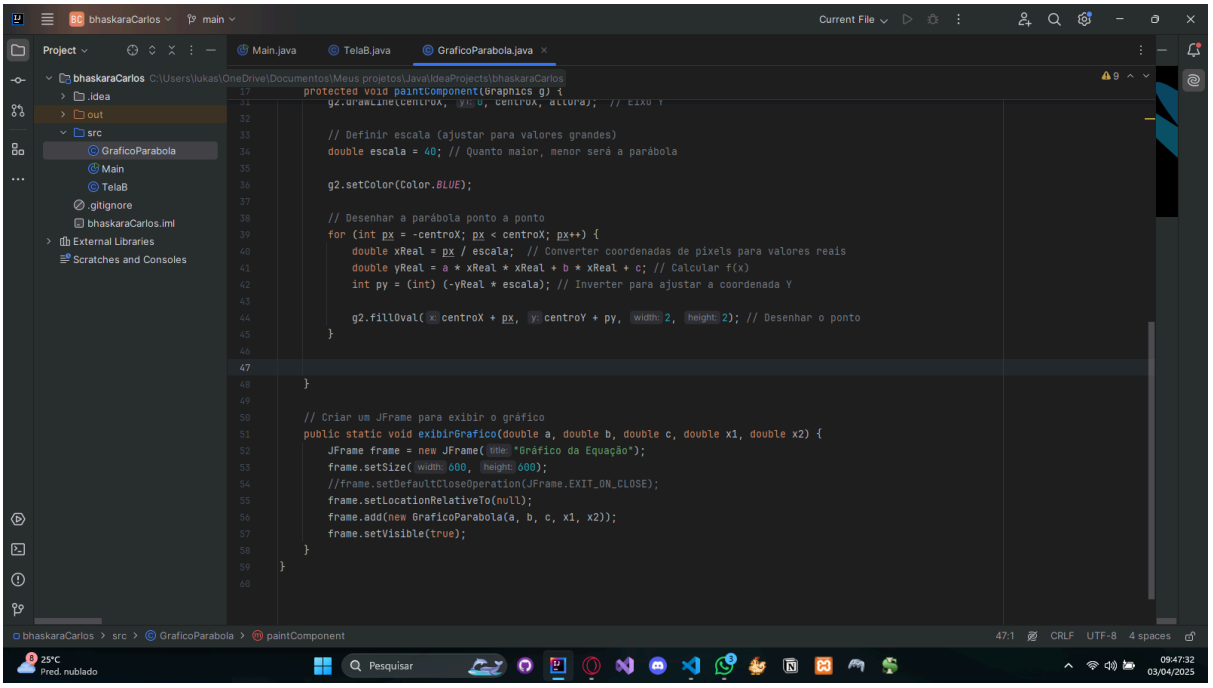
atvd bhaskara Lukas R. Bariani
https://github.com/LukasBariani/Java/tree/main/IdeaProjects/bhaskaraCarlos

classe para fazer o grafico da parabola

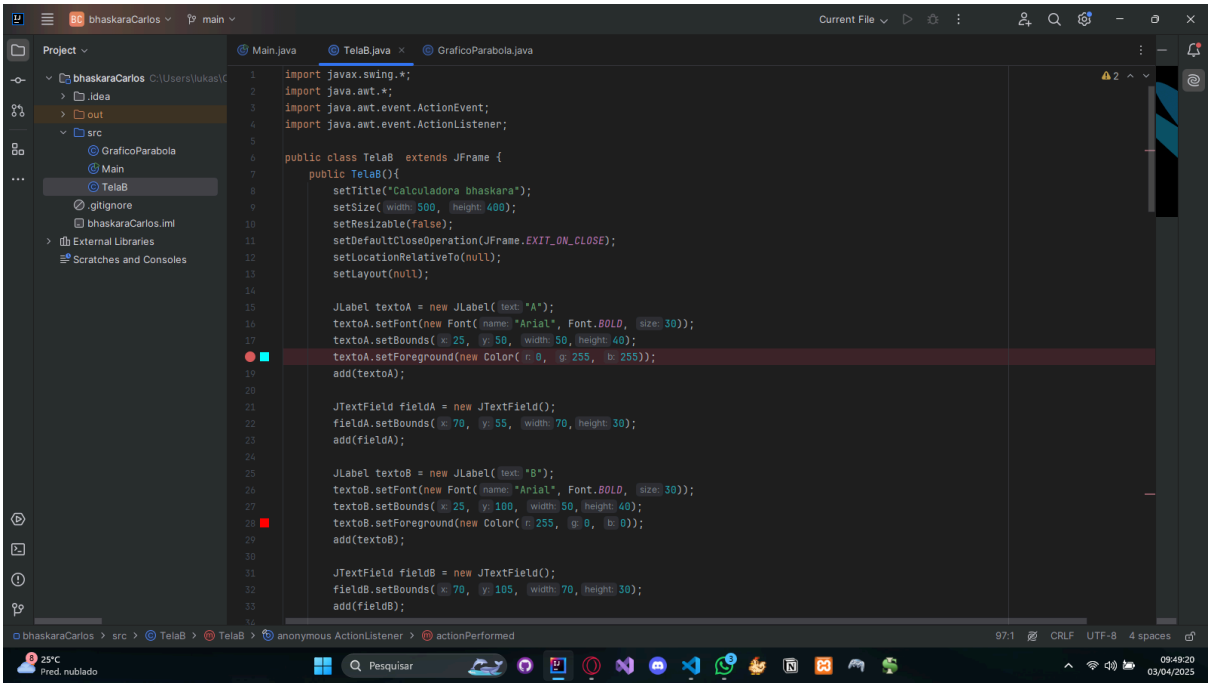


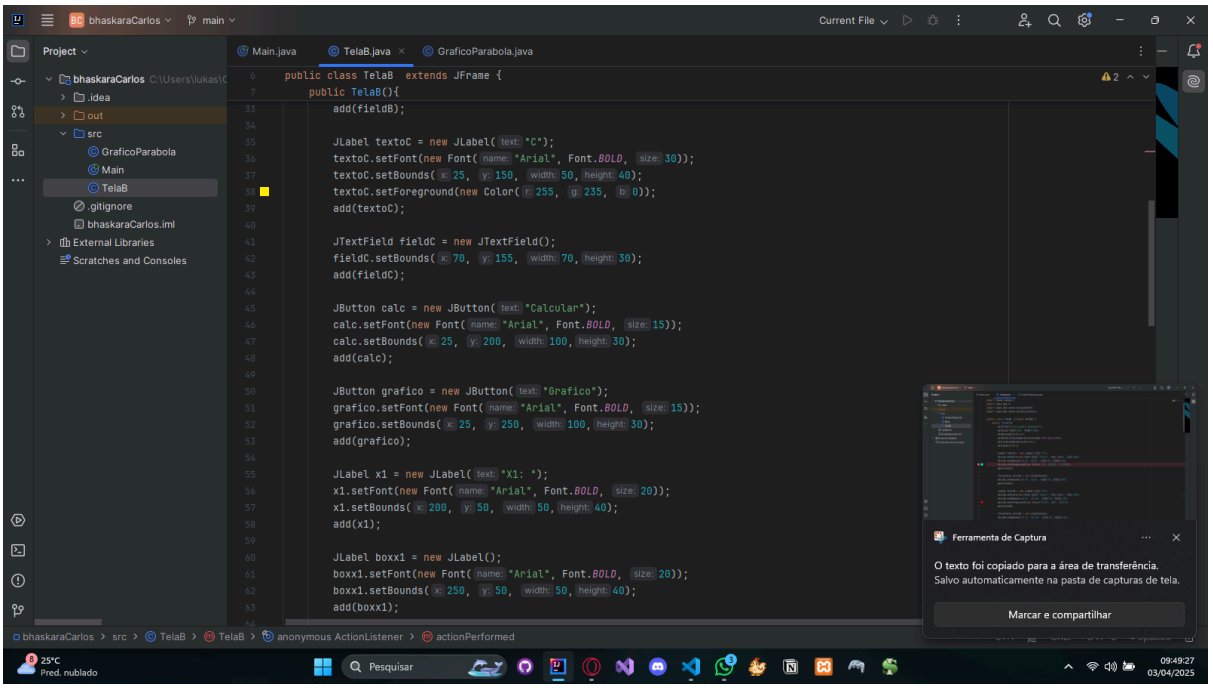
```java
import javax.swing.*;
C:\Users\lukas\OneDrive\Documentos\Meus projetos\Java\IdeaProjects\bhaskaraCarlos\src\Main.java

public class GraficoParabola extends JPanel {
    private double a, b, c, x1, x2;

    // Construtor recebe os coeficientes e raízes
    public GraficoParabola(double a, double b, double c, double x1, double x2) {
        this.a = a;
        this.b = b;
        this.c = c;
        this.x1 = x1;
        this.x2 = x2;
    }

    @Override
    protected void paintComponent(Graphics g) {
        super.paintComponent(g);
        Graphics2D g2 = (Graphics2D) g;

        int largura = getWidth();
        int altura = getHeight();

        // Definir centro do gráfico
        int centroX = largura / 2;
        int centroY = altura / 2;

        // Desenhar os eixos X e Y
        g2.setColor(Color.BLACK);
        g2.drawLine( x1: 0, centroY, largura, centroY); // Eixo X
        g2.drawLine(centroX,  y1: 0, centroX, altura);  // Eixo Y

        // Definir escala (ajustar para valores grandes)
        double escala = 40; // Quanto maior, menor será a parábola
```

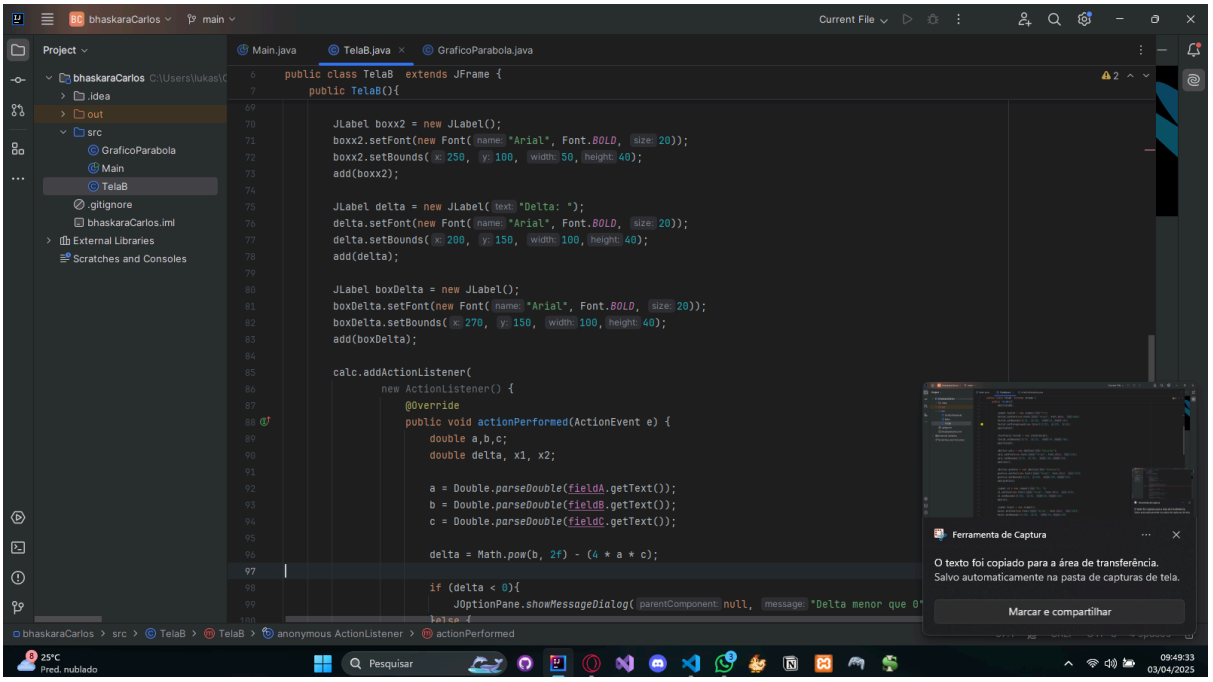


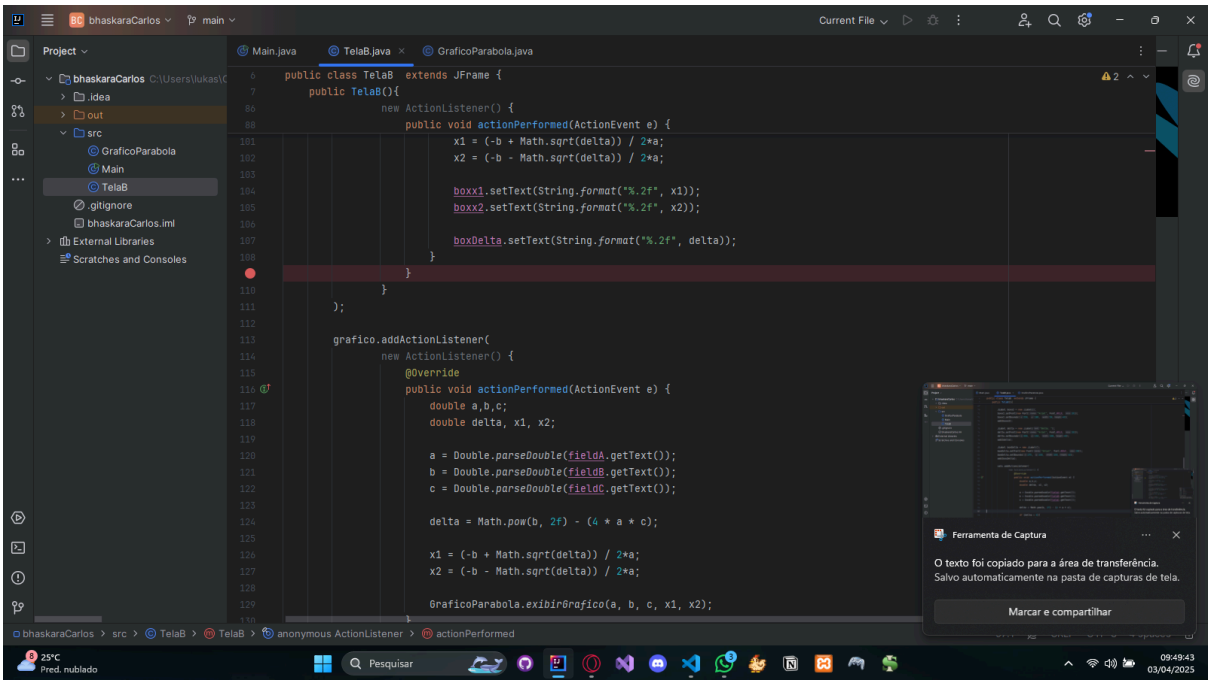
```java
        protected void paintComponent(Graphics g) {
        // Definir escala (ajustar para valores grandes)
        double escala = 40; // Quanto maior, menor será a parábola

        g2.setColor(Color.BLUE);

        // Desenhar a parábola ponto a ponto
        for (int px = -centroX; px < centroX; px++) {
            double xReal = px / escala;  // Converter coordenadas de pixels para valores reais
            double yReal = a * xReal * xReal + b * xReal + c; // Calcular f(x)
            int py = (int) (-yReal * escala); // Inverter para ajustar a coordenada Y

            g2.fillOval( x: centroX + px,  y: centroY + py,  width: 2,  height: 2); // Desenhar o ponto
        }


    }

    // Criar um JFrame para exibir o gráfico
    public static void exibirGrafico(double a, double b, double c, double x1, double x2) {
        JFrame frame = new JFrame( title: "Gráfico da Equação");
        frame.setSize( width: 600,  height: 600);
        //frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        frame.setLocationRelativeTo(null);
        frame.add(new GraficoParabola(a, b, c, x1, x2));
        frame.setVisible(true);
    }
}
```

classe para a tela principal

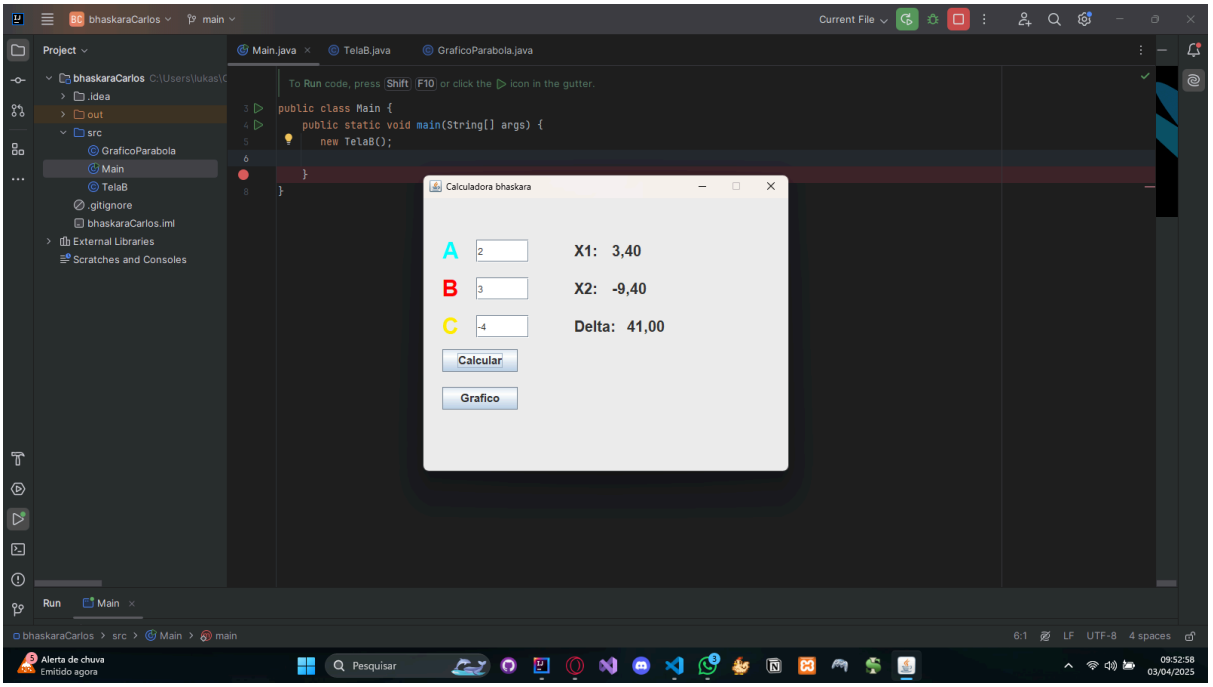

bhaskaraCarlos
main
Current File
Project
Main.java
TelaB.java
GraficoParabola.java
bhaskaraCarlos C:\Users\lukas\C
.idea
out
src
GraficoParabola
Main
TelaB
.gitignore
bhaskaraCarlos.iml
External Libraries
Scratches and Consoles
import javax.swing.*;
import java.awt.*;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
public class TelaB extends JFrame {
public TelaB(){
setTitle("Calculadora bhaskara");
setSize(width: 500, height: 400);
setResizable(false);
setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
setLocationRelativeTo(null);
setLayout(null);
JLabel textoA = new JLabel(text: "A");
textoA.setFont(new Font(name: "Arial", Font.BOLD, size: 30));
textoA.setBounds(x: 25, y: 50, width: 50, height: 40);
textoA.setForeground(new Color(r: 0, g: 255, b: 255));
add(textoA);
JTextField fieldA = new JTextField();
fieldA.setBounds(x: 70, y: 55, width: 70, height: 30);
add(fieldA);
JLabel textoB = new JLabel(text: "B");
textoB.setFont(new Font(name: "Arial", Font.BOLD, size: 30));
textoB.setBounds(x: 25, y: 100, width: 50, height: 40);
textoB.setForeground(new Color(r: 255, g: 0, b: 0));
add(textoB);
JTextField fieldB = new JTextField();
fieldB.setBounds(x: 70, y: 105, width: 70, height: 30);
add(fieldB);
bhaskaraCarlos > src > TelaB > TelaB > anonymous ActionListener > actionPerformed
97:1 CRLF UTF-8 4 spaces
25°C
Pred. nublado
Pesquisar
09:49:20
03/04/2025

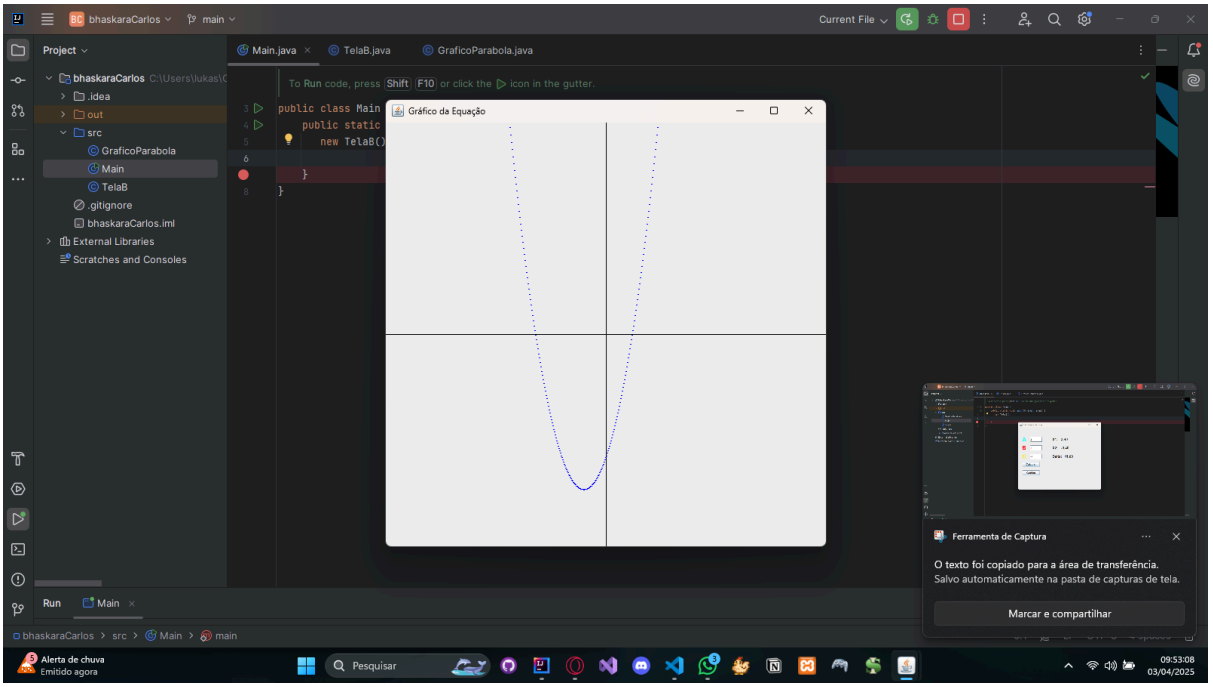

bhaskaraCarlos
main
Current File
Project
Main.java
TelaB.java
GraficoParabola.java
public class TelaB extends JFrame {
public TelaB(){
add(fieldB);
JLabel textoC = new JLabel(text: "C");
textoC.setFont(new Font(name: "Arial", Font.BOLD, size: 30));
textoC.setBounds(x: 25, y: 150, width: 50, height: 40);
textoC.setForeground(new Color(r: 255, g: 235, b: 0));
add(textoC);
JTextField fieldC = new JTextField();
fieldC.setBounds(x: 70, y: 155, width: 70, height: 30);
add(fieldC);
JButton calc = new JButton(text: "Calcular");
calc.setFont(new Font(name: "Arial", Font.BOLD, size: 15));
calc.setBounds(x: 25, y: 200, width: 100, height: 30);
add(calc);
JButton grafico = new JButton(text: "Grafico");
grafico.setFont(new Font(name: "Arial", Font.BOLD, size: 15));
grafico.setBounds(x: 25, y: 250, width: 100, height: 30);
add(grafico);
JLabel x1 = new JLabel(text: "X1: ");
x1.setFont(new Font(name: "Arial", Font.BOLD, size: 20));
x1.setBounds(x: 200, y: 50, width: 50, height: 40);
add(x1);
JLabel boxx1 = new JLabel();
boxx1.setFont(new Font(name: "Arial", Font.BOLD, size: 20));
boxx1.setBounds(x: 250, y: 50, width: 50, height: 40);
add(boxx1);
Ferramenta de Captura
O texto foi copiado para a área de transferência.
Salvo automaticamente na pasta de capturas de tela.
Marcar e compartilhar
bhaskaraCarlos > src > TelaB > TelaB > anonymous ActionListener > actionPerformed
25°C
Pred. nublado
Pesquisar
09:49:27
03/04/2025





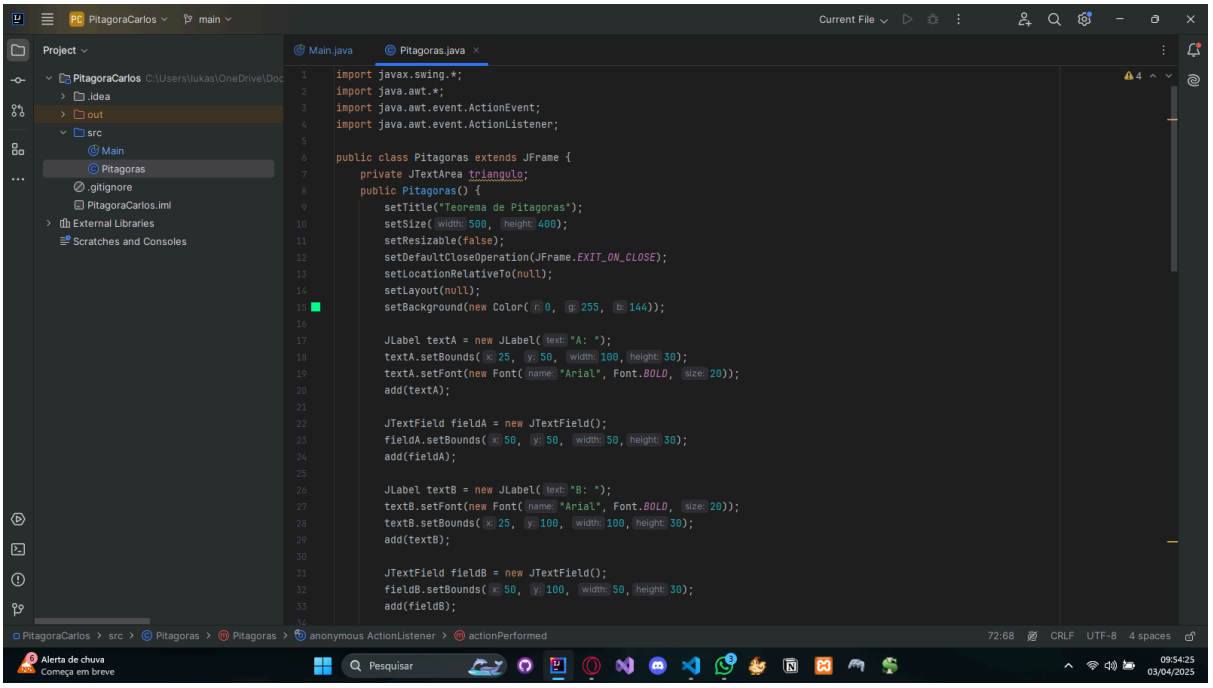
Funcionando

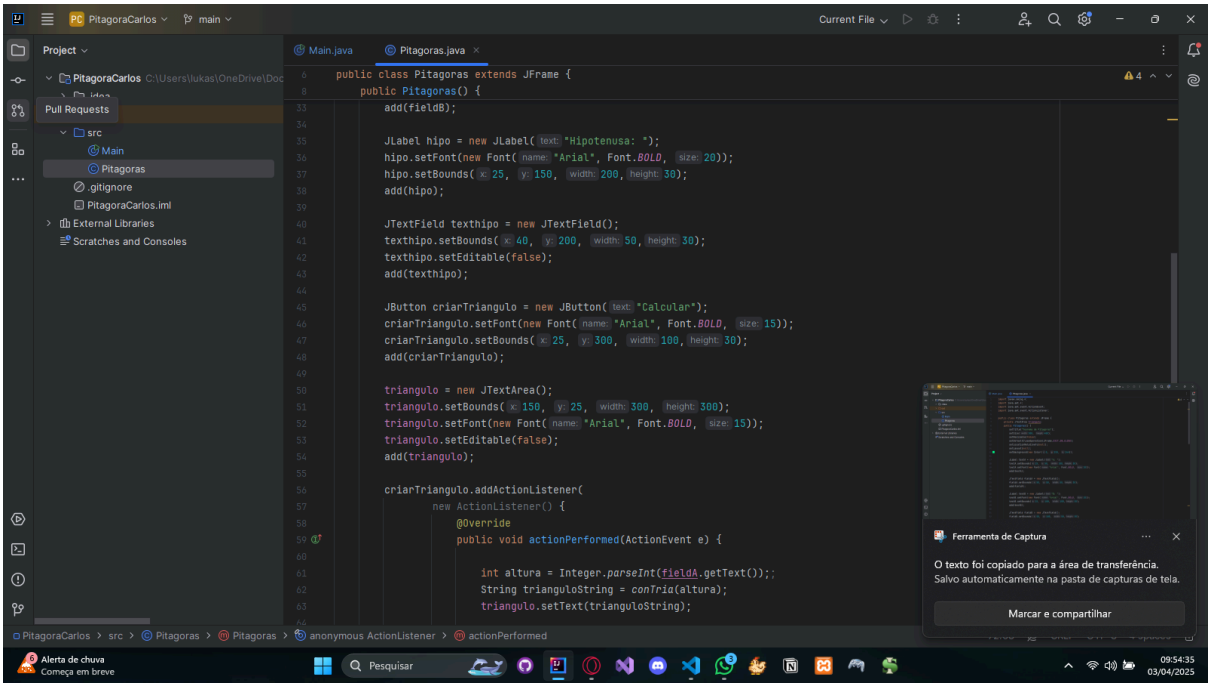


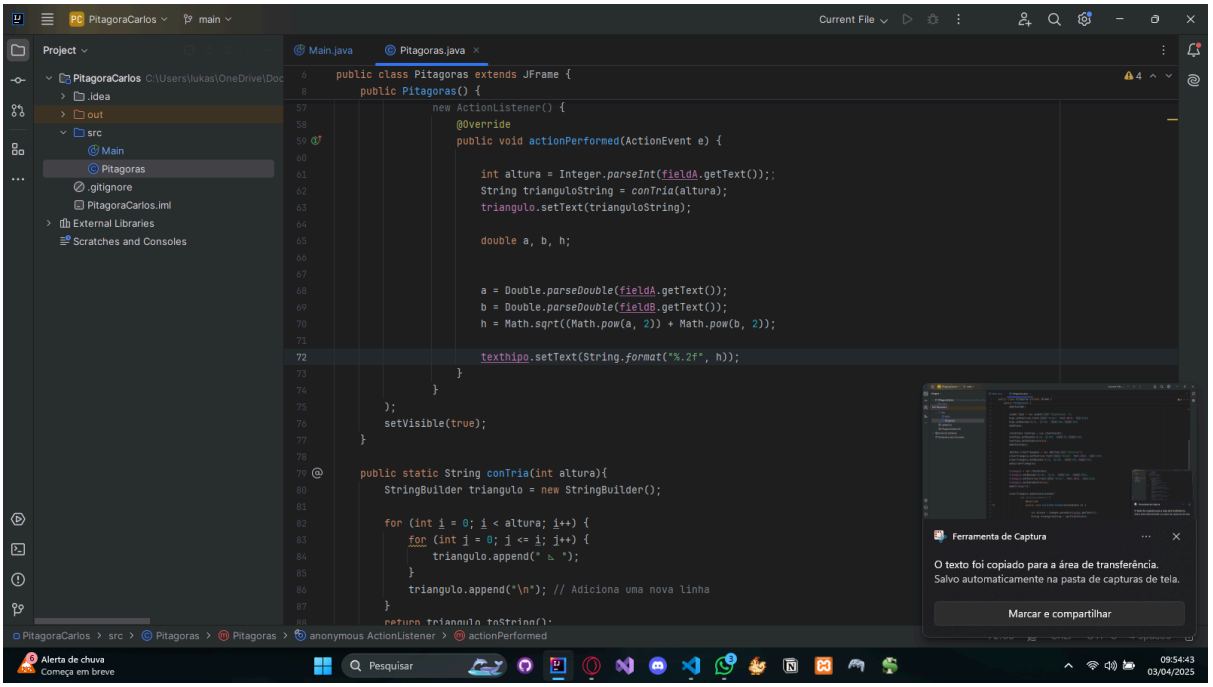


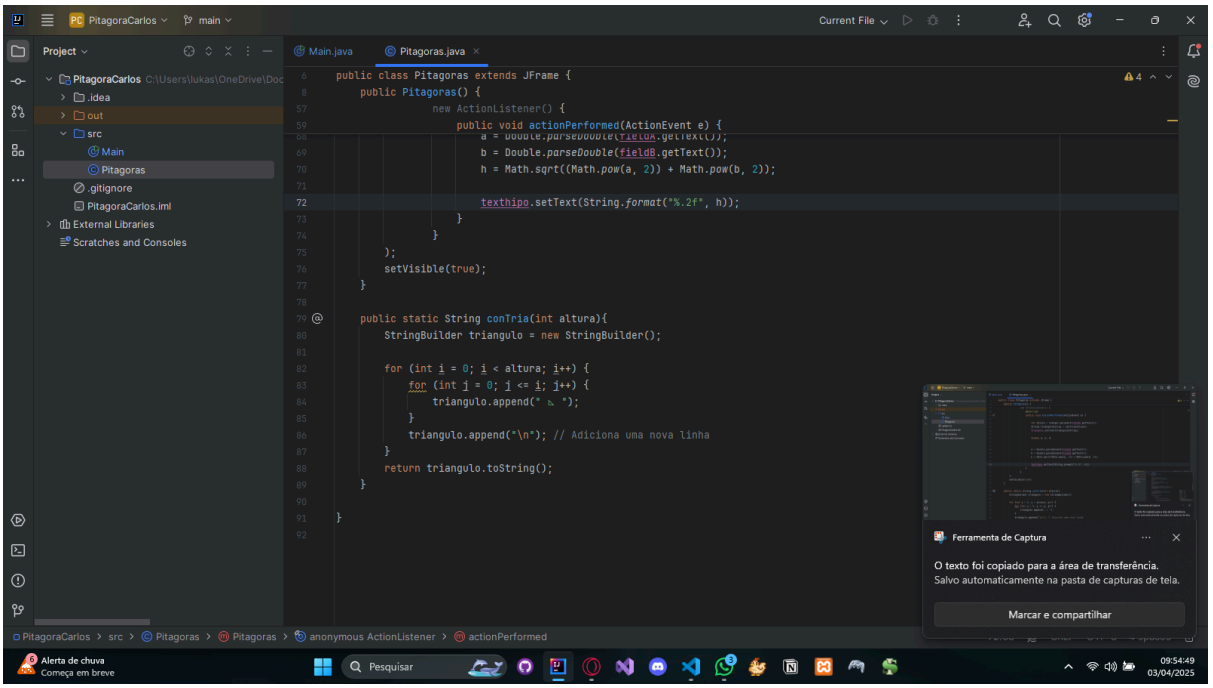
Atvd pitagora

https://github.com/LukasBariani/Java/tree/main/IdeaProjects/PitagoraCarlos






PitagoraCarlos
main
Current File
Project
Main.java
Pitagoras.java
public class Pitagoras extends JFrame {
public Pitagoras() {
new ActionListener() {
@Override
public void actionPerformed(ActionEvent e) {
int altura = Integer.parseInt(fieldA.getText());;
String trianguloString = conTria(altura);
triangulo.setText(trianguloString);
double a, b, h;
a = Double.parseDouble(fieldA.getText());
b = Double.parseDouble(fieldB.getText());
h = Math.sqrt((Math.pow(a, 2)) + Math.pow(b, 2));
texthipo.setText(String.format("%.2f", h));
}
}
);
setVisible(true);
}
public static String conTria(int altura){
StringBuilder triangulo = new StringBuilder();
for (int i = 0; i < altura; i++) {
for (int j = 0; j <= i; j++) {
triangulo.append("* ");
}
triangulo.append("\n"); // Adiciona uma nova linha
}
Ferramenta de Captura
O texto foi copiado para a área de transferência.
Salvo automaticamente na pasta de capturas de tela.
Marcar e compartilhar
Alerta de chuva
Começa em breve
Pesquisar
09:54:43
03/04/2025


PitagoraCarlos
main
Current File
Project
Main.java
Pitagoras.java
public class Pitagoras extends JFrame {
public Pitagoras() {
new ActionListener() {
public void actionPerformed(ActionEvent e) {
b = Double.parseDouble(fieldB.getText());
h = Math.sqrt((Math.pow(a, 2)) + Math.pow(b, 2));
texthipo.setText(String.format("%.2f", h));
}
}
);
setVisible(true);
}
public static String conTria(int altura){
StringBuilder triangulo = new StringBuilder();
for (int i = 0; i < altura; i++) {
for (int j = 0; j <= i; j++) {
triangulo.append("* ");
}
triangulo.append("\n"); // Adiciona uma nova linha
}
return triangulo.toString();
}
}
Ferramenta de Captura
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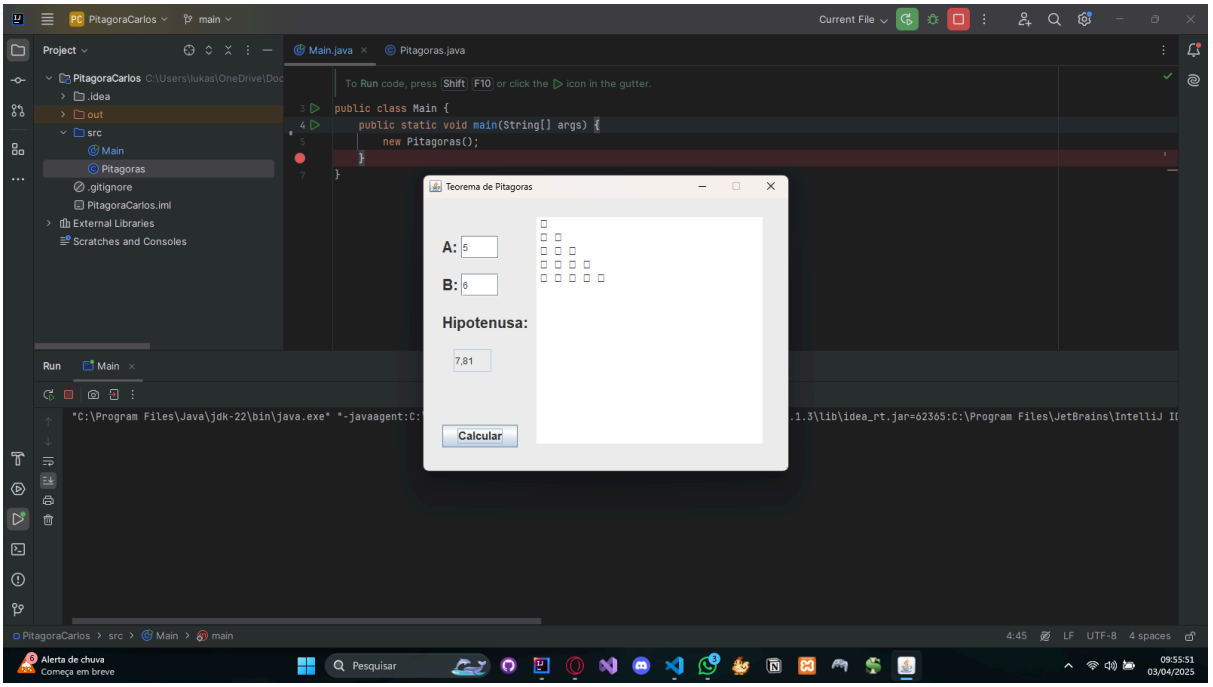
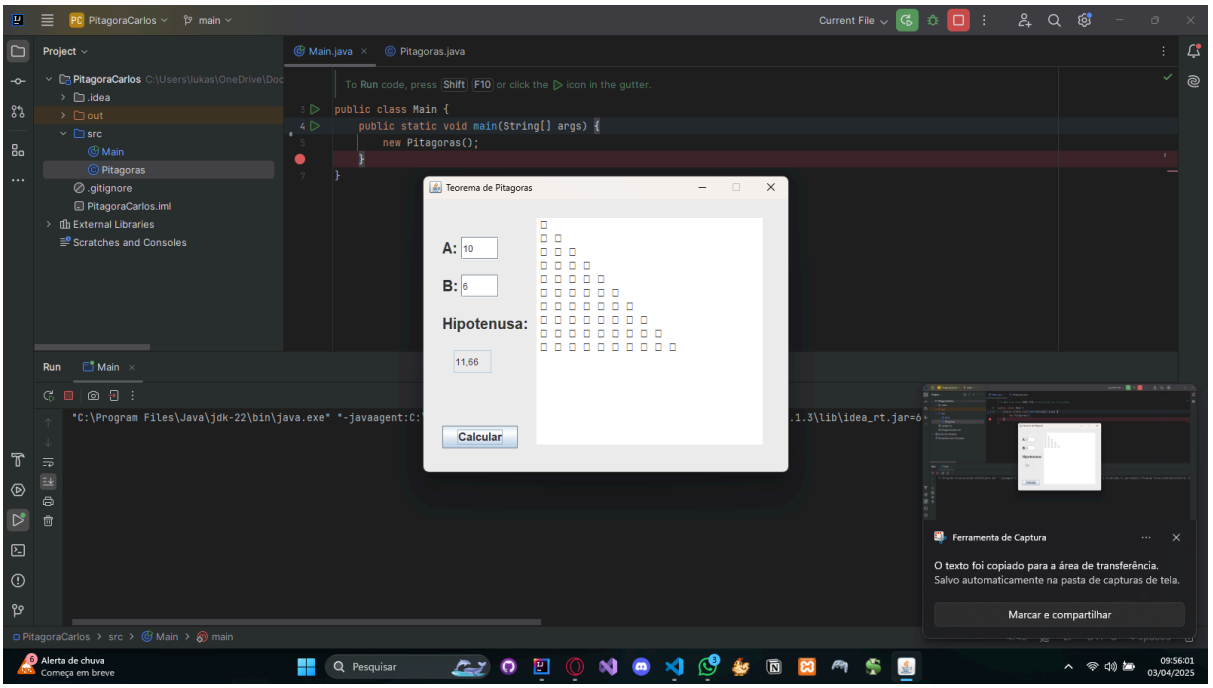
Marcar e compartilhar
Alerta de chuva
Começa em breve
Pesquisar
09:54:49
03/04/2025


Teorema de Pitagoras
A: 5
B: 6
Hipotenusa:
7,81
Calcular
Main.java
Pitagoras.java
public class Main {
public static void main(String[] args) {
new Pitagoras();
Run
Main


Teorema de Pitagoras
A: 10
B: 6
Hipotenusa:
11,66
Calcular
Ferramenta de Captura
O texto foi copiado para a área de transferência.
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Marcar e compartilhar
Main.java
Pitagoras.java
Run
Main