

Hey ChatGPT!

Write me a simple Java program that calculates the area of a rectangle using JOptionPane dialogs. The program should:

Ask the user for the rectangle's length.

Ask the user for the rectangle's width.

Multiply them to find the area.

Display the result in a message dialog.

Please use methods for each part: one method for getting the length, one for getting the width, and one for displaying the area. Use static variables to store length, width, and area.

Got it! Here's a simple Java program using `JOptionPane` that follows your requirements:

- Uses **static variables** for length, width, and area.

```
java
import javax.swing.JOptionPane;

public class RectangleAreaCalculator {

    // Static variables
    static double length;
    static double width;
    static double area;

    public static void main(String[] args) {
        getLength();
        getWidth();
        calculateArea();
        displayArea();
    }

    // Method to get length
    public static void getLength() {
        length = Double.parseDouble(input);
    }

    // Method to get width
    public static void getWidth() {
        String input = JOptionPane.showInputDialog("Enter the width of the rectangle:");
        width = Double.parseDouble(input);
    }

    // Method to calculate area
    public static void calculateArea() {
        area = length * width;
    }

    // Method to display area
    public static void displayArea() {
        JOptionPane.showMessageDialog(null, "The area of the rectangle is: " + area);
    }
}
```

👉 You can compile and run this with:

```
javac RectangleAreaCalculator.java
java RectangleAreaCalculator
```

Would you like me to also add **input validation** (so the program handles non-numeric input gracefully), or keep it strictly simple?

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Make the Java code more organized by adding comments above each method that explain what it does. Keep the use of `JOptionPane`, static variables, and methods exactly the same.

Perfect 🙌 I'll keep the structure exactly the same but add clear explanatory comments above each method

so the code looks more organized and easier to understand.



Here's the updated version:

```
java Copy code

import javax.swing.JOptionPane;

public class RectangleAreaCalculator {

    // Static variables to store rectangle dimensions and area
    static double length;
    static double width;
    static double area;

    public static void main(String[] args) {
        getLength();    // Ask user for length
        getWidth();     // Ask user for width
        calculateArea(); // Compute the area
        displayArea();  // Show result
    }

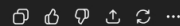
    /**
     * Prompts the user to enter the length of a rectangle
     * and stores it in the static variable 'length'.
     */
    public static void getLength() {
        String input = JOptionPane.showInputDialog("Enter the length of the rectangle:");
        length = Double.parseDouble(input);
    }

    /**
     * Prompts the user to enter the width of the rectangle
     * and stores it in the static variable 'width'.
     */
    public static void getWidth() {
        String input = JOptionPane.showInputDialog("Enter the width of the rectangle:");
        width = Double.parseDouble(input);
    }

    /**
     * Calculates the area of the rectangle
     * using the stored length and width,
     * then saves the result in the static variable 'area'.
     */
    public static void calculateArea() {
        area = length * width;
    }

    /**
     * Displays the calculated area of the rectangle
     * in a message dialog.
     */
    public static void displayArea() {
        JOptionPane.showMessageDialog(null, "The area of the rectangle is: " + area);
    }
}
```

Do you also want me to add a **class-level comment** at the very top (like a short description of what the program does), or keep comments only for the methods?



Please adjust the program so that the class is named `AreaRec_JOpt`, include a comment header with program description, author, and date, and make the code neat and easy to read. Also the program's name must be `JavaCode_AreaRec_JOpt_Kandula_Aryan`

Got it! I'll rename the class to `AreaRec_JOpt`, add a proper comment header (with program description, author, and date), and ensure the formatting is neat and easy to read. The program's filename must be `JavaCode_AreaRec_JOpt_Kandula_Aryan.java` so the class name and file match.

Here's the updated version:

```
java Copy code

/**
 * Program Name: JavaCode_AreaRec_JOpt_Kandula_Aryan
 * Description: This program calculates the area of a rectangle.
 *              It uses JOptionPane dialogs to get the length and width
 *              from the user, calculates the area, and then displays it.
 * Author: Kandula Aryan
 * Date: September 21, 2025
 */
```

```

import javax.swing.JOptionPane;

public class AreaRec_3Opt {

    // Static variables to store rectangle dimensions and area
    static double length;
    static double width;
    static double area;

    public static void main(String[] args) {
        getLength();    // Ask user for length
        getWidth();     // Ask user for width
        calculateArea(); // Compute the area
        displayArea();  // Show result
    }

    /**
     * Prompts the user to enter the length of the rectangle
     * and stores it in the static variable 'length'.
     */
    public static void getLength() {
        String input = JOptionPane.showInputDialog("Enter the length of the rectangle:");
        length = Double.parseDouble(input);
    }

    /**
     * Prompts the user to enter the width of the rectangle
     * and stores it in the static variable 'width'.
     */
    public static void getWidth() {
        String input = JOptionPane.showInputDialog("Enter the width of the rectangle:");
        width = Double.parseDouble(input);
    }

    /**
     * Calculates the area of the rectangle
     * using the stored length and width,
     * then saves the result in the static variable 'area'.
     */
    public static void calculateArea() {
        area = length * width;
    }

    /**
     * Displays the calculated area of the rectangle
     * in a message dialog.
     */
    JOptionPane.showMessageDialog(null, "The area of the rectangle is: " + area);
}

```

⚡ To compile and run it correctly, save the file as:

`JavaCode_AreaRec_3Opt_Kandula_Aryan.java`

Would you like me to also add a **confirmation dialog** that asks the user if they want to calculate another rectangle's area (loop until they choose "No"), or keep it as a one-time calculation?

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That's Great! I got all I wanted, Thank you.

You're very welcome! 🎉 I'm glad the program turned out exactly how you wanted.

Good luck with compiling and running `JavaCode_AreaRec_3Opt_Kandula_Aryan.java` 🚀

Would you like me to also show you what the `JOptionPane` dialogs will look like step by step when the program runs, so you can visualize the flow?

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+ Ask anything



ChatGPT can make mistakes. Check important info.