**Program 07 : Resizable interface**

**Develop a JAVA program to create an interface Resizable with methods resizeWidth(int width) and resizeHeight(int height) that allow an object to be resized. Create a class Rectangle that implements the Resizable interface and implements the resize methods.**

### Java Code

// Resizable interface

interface Resizable {

void resizeWidth(int width);

void resizeHeight(int height);

}

// Rectangle class implementing Resizable interface

class Rectangle implements Resizable {

private int width;

private int height;

public Rectangle(int width, int height) {

this.width = width;

this.height = height;

}

// Implementation of Resizable interface

@Override

public void resizeWidth(int width) {

this.width = width;

System.out.println("Resized width to: " + width);

}

@Override

public void resizeHeight(int height) {

this.height = height;

System.out.println("Resized height to: " + height);

}

// Additional methods for Rectangle class

public int getWidth() {

return width;

}

public int getHeight() {

return height;

}

public void displayInfo() {

System.out.println("Rectangle: Width = " + width + ", Height = " + height);

}

}

// Main class to test the implementation

public class ResizeDemo {

public static void main(String[] args) {

// Creating a Rectangle object

Rectangle rectangle = new Rectangle(10, 5);

// Displaying the original information

System.out.println("Original Rectangle Info:");

rectangle.displayInfo();

// Resizing the rectangle

rectangle.resizeWidth(15);

rectangle.resizeHeight(8);

// Displaying the updated information

System.out.println("\nUpdated Rectangle Info:");

rectangle.displayInfo();

}

}

### Output

$ java ResizeDemo

Original Rectangle Info:

Rectangle: Width = 10, Height = 5

Resized width to: 15

Resized height to: 8

Updated Rectangle Info:

Rectangle: Width = 15, Height = 8