Programowanie w języku JAVA

Laboratorium 3

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Color.java

record Color(int red, int green, int blue, int alpha) implements Comparable<Color> {  
  
 public Color {  
 if (red < 0 || red > 255 || green < 0 || green > 255 || blue < 0 || blue > 255 || alpha < 0 || alpha > 255) {  
 throw new IllegalArgumentException("Wartości kolorów muszą być w zakresie 0 - 255");  
 }  
 }  
  
 Color(int red, int green, int blue) {  
 this(red, green, blue, 0);  
 }  
  
 @Override  
 public int compareTo(Color other) {  
 double thisLuminance = 0.2126 \* this.red + 0.7152 \* this.green + 0.0722 \* this.blue;  
 double otherLuminance = 0.2126 \* other.red + 0.7152 \* other.green + 0.0722 \* other.blue;  
 return Double.*compare*(thisLuminance, otherLuminance);  
 }  
}

Main.java

import java.util.Arrays;  
  
public class Main {  
 public static void main(String[] args) {  
 Color color1 = new Color(255, 33, 6);  
 Color color2 = new Color(0, 0, 7);  
 Color color3 = new Color(55, 60, 255, 128);  
  
 System.*out*.println(color1);  
 System.*out*.println("Red: " + color1.red());  
 System.*out*.println("Green: " + color1.green());  
 System.*out*.println("Blue: " + color1.blue());  
  
 Color[] colors = {color1, color2, color3};  
 Arrays.*sort*(colors);  
  
 for (Color color : colors) {  
 System.*out*.println(color);  
 }  
 }  
}