

Chapter 4, #21 – Inverted-color image:

```
import java.awt.*;
import java.awt.image.BufferedImage;
import com.programwithjava.basic.DrawingKit;

public class ChangeImageColors {
    public static void main(String[] args) {
        DrawingKit dk = new DrawingKit("Change colors", 1680, 700);
        BufferedImage picture = dk.loadPicture("image/daffodils.jpg");
        // draw the original picture
        dk.drawPicture(picture, 0, 50);

        // modify the pixels in the picture
        for (int x = 0; x < picture.getWidth(); x++) {
            for (int y = 0; y < picture.getHeight(); y++) {
                // get the red, green and blue components of pixel at (x, y)
                int colorValue = picture.getRGB(x, y);
                Color pixelColor = new Color(colorValue);
                int red = pixelColor.getRed();
                int green = pixelColor.getGreen();
                int blue = pixelColor.getBlue();

                red = 255-red;
                green = 255-green;
                blue = 255-blue;

                // update the pixel color in picture
                Color newPixelColor = new Color(red, green, blue);
                int newRgbvalue = newPixelColor.getRGB();
                picture.setRGB(x, y, newRgbvalue);
            } // end inner for loop
        } // end outer for loop

        // draw the modified picture
        dk.drawPicture(picture, 800, 50);
    }
}
```

