

```

// PeepholeViewer.java - PEEPHOLE 24-BIT IMAGE VIEWER
//
// MODULE INDEX
// NAME          CONTENTS
// main          Main line
//
// MAINTENANCE HISTORY
// DATE          PROGRAMMER AND DETAIL
// 04-10-17     SHT      Original
//
//-----

// IMPORTATION

import java.awt.image.BufferedImage;
import java.io.File;
import java.io.FileInputStream;
import java.io.IOException;
import javax.swing.ImageIcon;
import javax.swing.JLabel;
import javax.swing.JOptionPane;

//-----

// MAIN LINE

public
class PeepholeViewer
{
    public static void
    main(
        String[] args)      // Command line argument
        throws IOException
    {
        int x;              // X coordinate
        int y;              // Y Coordinate
        int width;          // Image width
        int height;         // Image height
        int color;          // Color value

        if (args.length == 0)
        {
            System.err.println("Usage: java PeepholeViewer <filename>");
            System.exit(1);
        }

        FileInputStream stream = new FileInputStream(new File(args[0]));

        if (
            stream.read() != 'P' ||
            stream.read() != 'H' ||
            stream.read() != '2' ||
            stream.read() != '4'
        ) {

```

```
System.err.println("Invalid file header");
System.exit(0);
```

```
}
```

```
width = stream.read() << 24
        | stream.read() << 16
        | stream.read() << 8
        | stream.read();
```

```
height = stream.read() << 24
          | stream.read() << 16
          | stream.read() << 8
          | stream.read();
```

```
BufferedImage img = new BufferedImage(width, height, BufferedImage.TYPE_INT_RGB);
```

```
for (y = height - 1; y >= 0; y--)
```

```
{
```

```
    for (x = 0; x < width; x++)
```

```
    {
```

```
        color = stream.read() << 16           // Red component
                | stream.read() << 8           // Green component
                | stream.read();               // Blue component
```

```
        img.setRGB(x, y, color);
```

```
    }
```

```
}
```

```
stream.close();
```

```
ImageIcon icon = new ImageIcon(img);
```

```
JLabel label = new JLabel(icon);
```

```
JOptionPane.showMessageDialog(
```

```
    null, label, "Peephole Viewer", JOptionPane.PLAIN_MESSAGE
```

```
);
```

```
}
```

```
}
```