

```

1  package Assign_4_A;
2
3  import Media.*;           // for Picture and PictureDisplayer
4  import java.awt.*;        // for Color objects and methods
5  import static java.lang.Math.*; // for math constants and functions
6  import static java.awt.Color.*; // for Color constants
7
8  /** This class creates a "posterized" version of a photo.
9   *
10   * @author Sawyer Fenwick st#6005011
11   * @version 1.0 November 7 2016
12   */
13  public class Poster {
14
15      // instance variables
16      private PictureDisplayer display;
17
18      /* This constructor displays a picture on the display and posterizes it using
19      the method "Posterize" */
20      public Poster ( ) {
21
22          Picture pic;
23          display = new PictureDisplayer(500, 619);
24          pic = new Picture();
25          display.placePicture(pic);
26          display.waitForUser();
27          Posterize(pic);
28
29          display.close();
30
31      }; // constructor
32
33      /* This method sets the color channel of each color between 0-3, then scales it
34      (*64) so that the picture
35      * is not all black, giving color channels of either, 0, 64, 128, or 192.*/
36      private void Posterize(Picture aPic){
37
38          Pixel x;
39          int b;
40          int g;
41          int r;
42
43          while(aPic.hasNext()){
44
45              x = aPic.next();
46              g = x.getGreen();
47              b = x.getBlue();
48              r = x.getRed();
49
50              x.setGreen((int) (g/64*64));
51              x.setBlue((int) (b/64*64));
52              x.setRed((int) (r/64*64));
53          }
54
55      }; // Posterize
56
57      public static void main ( String[] args ) { Poster s = new Poster(); };
58
59  } // Poster

```