```java
//*********************************************************************
//
// File:    ImageHandler.java
// Package: ---
// Unit:    Class ImageHandler
//
//*********************************************************************

import java.io.BufferedOutputStream;


/**
 * Class takes care of saving the results of the simulation as an image
 *
 * @author Jimi Ford (jhf3617)
 * @version 3-31-2015
 */
public class ImageHandler {

    // private data members
    private static final byte SILENT = 0,
                              CHIRPED = 1,
                              SYNC = 2;

    /**
     *
     * @param o the cricket observer that holds the results of the simulation
     * @param out the name of the image file to save
     * @throws FileNotFoundException if there was an error writing to the given
     * file
     */
    public static void handle(CricketObserver o, String out)
            throws FileNotFoundException {
        AList<Color> palette = new AList<Color>();
        Color green = new Color().rgb(0, 255, 0);// green
        Color red = new Color().rgb(255, 0, 0); // red
        Color blue = new Color().rgb(0,0,255); // blue
        palette.addLast (green);
        palette.addLast (red);
        palette.addLast (blue);


        OutputStream imageout =
                new BufferedOutputStream (new FileOutputStream (new File(out)));
        IndexPngWriter imageWriter = new IndexPngWriter
                (o.ticks, o.crickets, imageout, palette);
        ByteImageQueue imageQueue = imageWriter.getImageQueue();
        byte[] bytes;
        boolean chirped;
        int sync = o.sync();
        for(int i = 0; i < o.ticks; i++) {
            bytes = new byte[o.crickets];
            for(int j = 0, cricket = 0; j < bytes.length; j++, cricket++) {
                if(i != sync) {
                    chirped = o.chirped(i, cricket);
                    bytes[j] = chirped ? CHIRPED : SILENT;
                } else {
                    bytes[j] = SYNC;
```

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68                  }
69              }
70              try {
71                  imageQueue.put(i, bytes);
72              } catch (InterruptedException e) {
73                  // TODO Auto-generated catch block
74                  e.printStackTrace();
75              }
76          }
77          try {
78              imageWriter.write();
79          } catch (IOException e) {
80              // TODO Auto-generated catch block
81              e.printStackTrace();
82          } catch (InterruptedException e) {
83              // TODO Auto-generated catch block
84              e.printStackTrace();
85          }
86      }
87  }
88
```