Assignment No. 06

Code:

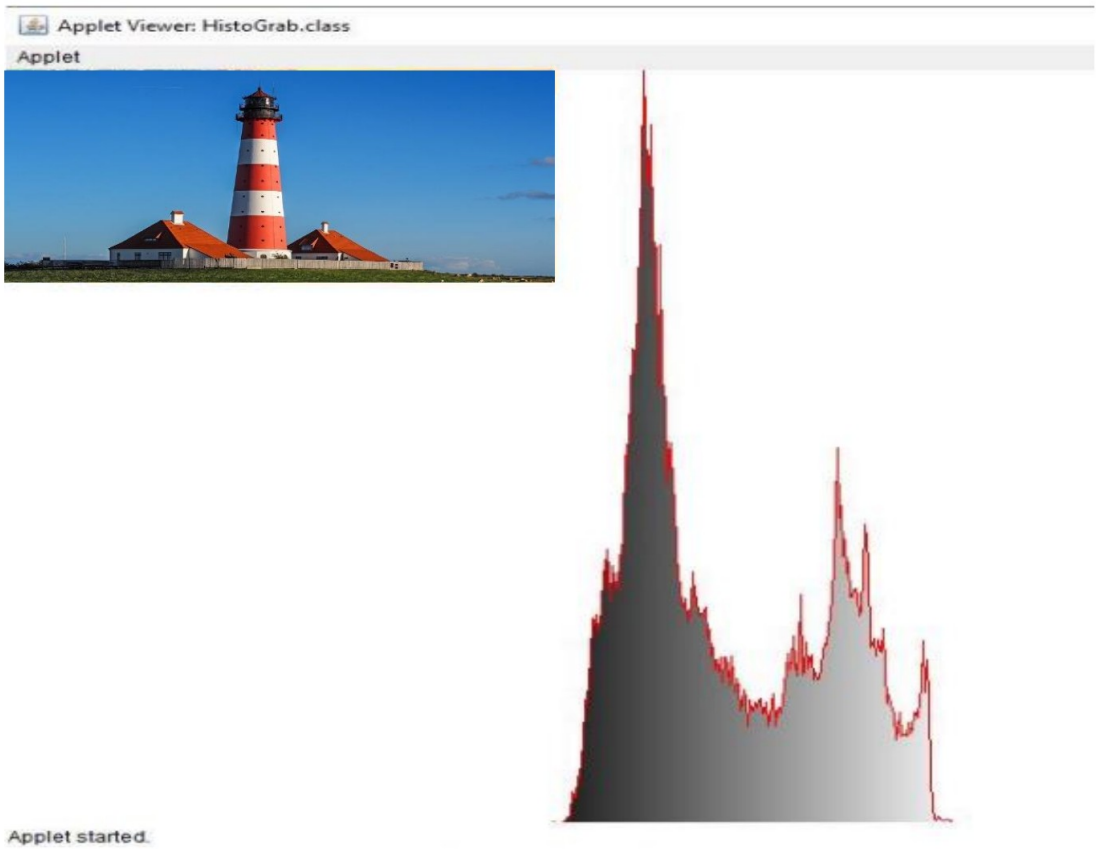
```
import java.awt.*;
import java.awt.image.BufferedImage;
import java.io.*;
import javax.imageio.ImageIO;
public class Exatraction{
    private static BufferedImage orignal,answer;
    public static void main(String[] args) throws IOException{
        File orignal_f=new File("D:\\BEIT\\ISR LAB\\sample java file\\as6.jpg");
        orignal = ImageIO.read(orignal_f);
        answer=imageHistogram(orignal);
        writeImage("featureExtraction");
    }
    private static void writeImage(String output) throws IOException {
   // File file = new File(output+".jpg");
   File file = new File(output+".jpg");
   ImageIO.write(answer, "jpg", file);
 }
     private static int colorToRGB(int alpha, int red, int green, int blue) {
       int newPixel = 0;
       newPixel += alpha; newPixel = newPixel << 8;
       newPixel += red; newPixel = newPixel << 8;
       newPixel += green; newPixel = newPixel << 8;
       newPixel += blue;
       return newPixel;
     }
     public static BufferedImage imageHistogram(BufferedImage input) {
            BufferedImage redGraph = new BufferedImage(input.getWidth(),input.getHeight(),input.getType());
       for(int i=0; i<input.getWidth(); i++)
       {
        for(int j=0; j<input.getHeight(); j++)
        {
            int alpha =new Color(input.getRGB (i, j)).getAlpha();
          int blue = new Color(input.getRGB (i, j)).getBlue();
          redGraph.setRGB(i, j, colorToRGB(alpha, 0,0,blue));
        }
       }
       return redGraph;
     }
}
```

OUTPUT:

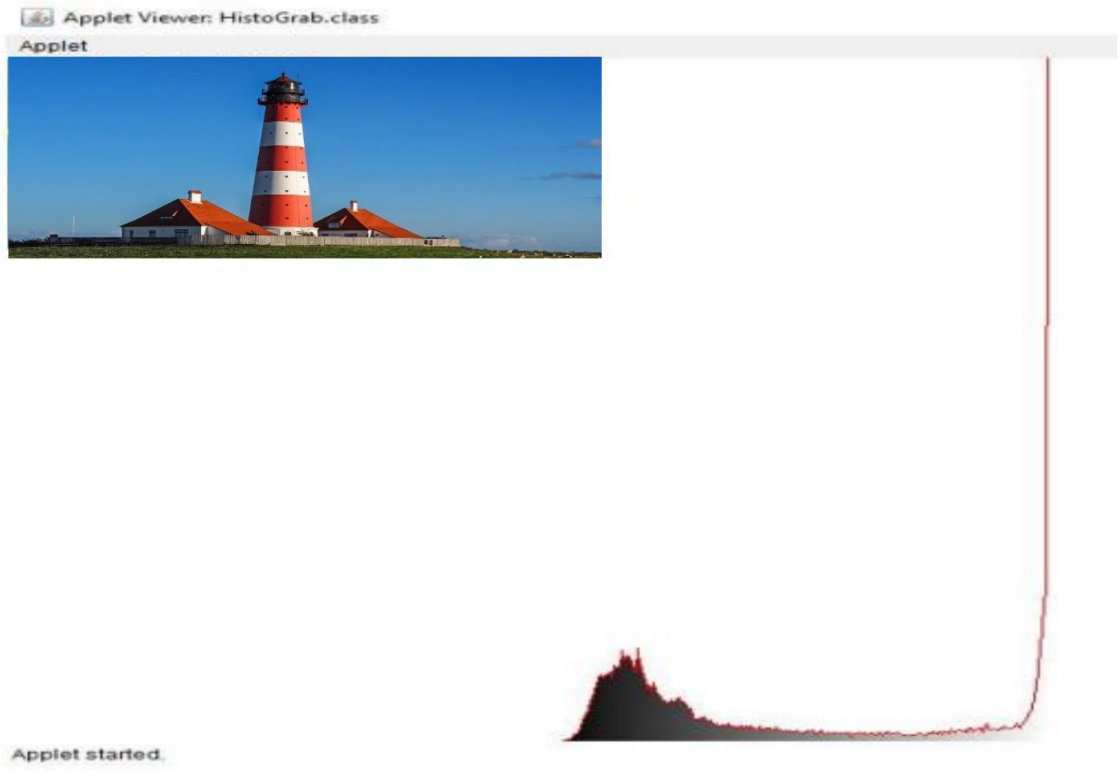
Image:

Output:

Histogram for combination of red, green, blue model



Histogram for combination of red model



Histogram for combination of green model