**Threshold_Image**

```
PImage source; // Source image
PImage destination; // Destination image

void setup()
{
 size(1024, 768); // Output window size (length x breadth)
 source = loadImage("Lighthouse.jpg");
 destination = createImage(source.width, source.height, RGB);
}

void draw()
{
 float threshold = 127;
 source.loadPixels();
 destination.loadPixels();
 for (int x = 0; x < source.width; x++ )
 {
  for (int y = 0; y < source.height; y++ )
  {
   int loc = x + y*source.width;

   // Test the brightness against the threshold:
   if (brightness(source.pixels[loc]) > threshold)
   {
    destination.pixels[loc] = color(255); // White
   }
   else
   {
    destination.pixels[loc] = color(0); // Black
   }
  }
 }

 destination.updatePixels(); // Update the pixels in destination
 image(destination, 0, 0); // Display the destination
}
```