FINAL EXAM PROBLEM - PIXELS

As discussed. We know that an image is just a collection of pixels. These pixels are further divided into 3 components namely, the `RED`, `GREEN`, and `BLUE` components. Each component has values ranging from `0` - `255` and that digital colors are created by mixing these values.

From this, the standard of what a `DARK` image and what a `BRIGHT` image is established. Generally, an image is said to be `BRIGHT`, if more 50% + 1 or more of the total number of pixels in a picture has `RGB` values that are more than `128` and is said to be `DARK` otherwise.

EXPLANATION: since 255 is the max value for each component (RGB) we get 128 when 255 (max value) is divided by 2; Hence, values more than 128 are bright, and those equal to or less than 128 are dark. If all RGB components of a particular pixel falls below or equal to 128, then said pixel is considered dark, else, said pixel is considered bright.

Given this ods file containing a list of `RGB` components of a sample image.
copy and paste this link into your browser to download
dcs.adnu.edu.ph/~neithan/fedpsprobf.ods

(1) Determine if the sample image is generally `DARK` or generally `BRIGHT`. Answer `DARK` or `BRIGHT` in the submission page.
(2) Justify answer in (1) by counting `how many pixels are DARK`.
(3) Justify answer in (1) by counting `how many pixels are BRIGHT`