Histogram Speaks

IMH

Images are one of the most fasinating things. It is said "One image conveys a hundred words". Images are numbers represented in computer memory. The field that deals with images, operations of images, enhancement of images is know as digital image processing. A colored image is represented with 3 components R, G, B.(0<= R,G,B <= 255) whereas a gray-scale image is represented with only 1 component. (0 =< C <= 255)

One of the simplest format of image .ppm (Portable PixMap Format), This format is represented as simple ASCII text. the first line of the image is either P1 or P2 or P3.
P1 - binary image(having only 2 colors)
P2 - gray scale image
P3 - color image with (R,G,B) values
'#' represents comments inside of the image, which are to be ignored.
3rd line of input gives the maximum value, in the following file.****

Download this image. Open it, u see a colored image. Now try renaming the image to image.txt. Open the image in wordpad or any other editor. And ther you see the magic.

In digital image processing, people very often like to see the histogram of the 3 bands. A histogram is a graphical display of tabulated frequencies, shown as bars. You need to print the frequency of a particular colour for each of the three bands

Input
Input is the .ppm image on stdin. For more information on .ppm image format visit http://en.wikipedia.org/wiki/Netpbm_format

Output
The histogram of each of the 3 bands, in the specified format

EXAMPLE:

Input:
```
P3
512 512
255
46
23
59
...many many more
```

Output:
```
RED
0 20
1 35
..
255 90
GREEN
0 43
1 126
..
255 15
BLUE
0 43
1 245
..
255 67
```