

PGMA Files

Portable Gray Map (ASCII)

PGMA is the ASCII portable gray map format. It is a simple grayscale image description. The definition is as follows: The typical file extension is ".pgm", but an extension of ".pnm" is also occasionally used.

- A "magic number" for identifying the file type. An ASCII PGM file's magic number is the two characters "P2".
- Whitespace (blanks, TABs, CRs, LFs).
- A width, formatted as ASCII characters in decimal.
- Whitespace.
- A height, again in ASCII decimal.
- Whitespace.
- The maximum gray value, again in ASCII decimal.
- Whitespace.
- Width * height gray values, each in ASCII decimal, between 0 and the specified maximum value, separated by whitespace, starting at the top-left corner of the gray-map, proceeding in normal English reading order. A value of 0 means black and the maximum value means white.

Characters from a "#" to the next end-of-line are ignored (comments). No line should be longer than 70 characters.

You can use [ImageMagick](#) to display PGMA images.

PGMA example

The PGM and PPM formats (both ASCII and binary versions) have an additional parameter for the maximum value in a line between the X and Y dimensions and the actual pixel data.

```
P2
# Shows the word "FEEP" (example from Netpbm man page on PGM)
24 7
15
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 3 3 3 3 0 0 7 7 7 0 0 11 11 11 11 0 0 15 15 15 15 0
0 3 0 0 0 0 0 7 0 0 0 0 0 11 0 0 0 0 0 15 0 0 15 0
0 3 3 3 0 0 0 7 7 7 0 0 0 11 11 11 0 0 0 15 15 15 15 0
0 3 0 0 0 0 0 7 0 0 0 0 0 11 0 0 0 0 0 15 0 0 0 0
0 3 0 0 0 0 0 7 7 7 7 0 0 11 11 11 11 0 0 15 0 0 0 0
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
```

Example:

