(from: http://www.wizards-toolkit.org/discourse-server/viewtopic.php?f=1&t=15912)

How to get the color of a pixel

How do I get IM to tell me what the color is at pixel x,y?

(Unix)
# create a constant color image
color=`convert image.png -format "%[pixel: u.p{0,0}]" info:`

(Windows)
for /f %%i in ('convert image.png -format "%[pixel: u.p{0,0}]" info:') do set color=%%i

Can you get it to say the color in the "#rrggbb" format?
see http://www.imagemagick.org/Usage/files/#txt

txt:

This is a simple ASCII text file, which basically lists each pixel in the image, one per line. It is not a general text to image converter, for that see Multi-line Text Files Examples. If the 'pixel enumeration' is not reconised, the image will be passed to the "text:" format coder, for rendering as a plain text file. For example here is a "netscape:" image scale to a 2x2 pixel image, then listed using a "txt:" image format.

```
convert  netscape: -scale 2x2\! txt_netscape.txt
```

```
# ImageMagick pixel enumeration: 2,2,255,rgb
0,0: (187,102,127)  #BB667F  rgb(187,102,127)
1,0: ( 51,153,127)  #33997F  rgb(51,153,127)
0,1: (204,102,127)  #CC667F  rgb(204,102,127)
1,1: ( 68,153,127)  #44997F  rgb(68,153,127)
```

The first line (header) of the image is packed with the basic information about the image. The information consists of...
File Magic: The image header defines this file as a the special IM text image format (EG a "ImageMagick pixel enumeration" file), this is known in computing circles as the files 'magic' or the code string which identifies this file as being this specific file format.
Image Size: The next two numbers define the size of the image contained in this file. Multiplying these numbers together will also tell you how many lines should follow the header to fully define the image.
MaxValue: The last number in the header defines the 'maximum value' of the image data that is possible. In the above examples this was '255' which is a result of using a 8 bit depth.
The reason it output the built-in "rose:" image at this depth is because it was defined internally using 8-bit values, and as such IM preserved this depth level for the image. See the section on the depth setting for more information.
But you can override the depth setting (up to the limit of your IM's Q or Compile-time Quality setting, by changing the images "-depth". For example here I output the color values as 16 bit (or values from 0 to 65535)...

```
convert netscape: -scale 2x2\! -depth 16 txt_netscape_16.txt
```

```
# ImageMagick pixel enumeration: 2,2,65535,rgb
0,0: (48059,26214,32767)  #BBBB66667FFF  rgb(73.3333%,40%,49.9992%)
1,0: (13107,39321,32767)  #333399997FFF  rgb(20%,60%,49.9992%)
0,1: (52428,26214,32767)  #CCCC66667FFF  rgb(80%,40%,49.9992%)
1,1: (17476,39321,32767)  #444499997FFF  rgb(26.6667%,60%,49.9992%)
```

At this time you can not set a specific 'Maximum Value' to use in the output file format. You can only define a different value in terms of the current "`-depth`" setting, making the maximum value equal to `2^depth-1`.