Subject: Re: Conversion floating point to byte or integer
Posted by Jean H. on Thu, 11 Oct 2007 06:08:12 GMT
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>> So what do you want to do with values greater than 255?
>>
>> You could do
>> 1) compute your new image as a float,
>> 2) scale everything down so ALL of your values are between 0 and 255 and
>> save the image
>> or 2) brightPixels = where(image gt 255)
>> image[brightPixels] = 255 and save the image
>
> Jean,
>
> Thank you for your prompt reply and 2) is what I wanted.
> Could I ask why this happen? Am I asking too basic question about
> programming?

So you need to scale it, not to typecast it.
In IDL, if you typecast to byte, it does "wrap around" values, so that
255 is followed by 0...

```
IDL> print, byte(256)
   0
IDL> print, byte(256+257)
   1
```

if you scale it using BytScl(), it takes the smallest value and assign
it to 0, the max value to 255, and the result is a byte array

```
IDL> print, bytscl([250,251])
   0 255
```

Jean

> I casted output format to bytarr(cols, rows) to scale everything down
> 0-255, but result was same.
> I've read variables part in Liam's book, and tried the least
> significant 8 bit extraction.
> That doesn't seem to be the answer.
>
> Well, thank you again.
> Kim
>