Subject: Re: help with reading unsigned 16-bit integers
Posted by teich on Sun, 09 Dec 2007 20:12:15 GMT
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On Dec 9, 9:59 am, David Fanning <n...@dfanning.com> wrote:
> dcl...@gmail.com writes:
>> Try using ISHFT to create a mask that you will use to determine (by
>> using a bitwise AND) if/where given bits are set:
>> Taking your example for the 2-'cloud' bit:
>>> cloudmask = ISHFT(1,2)
>>> cloudy = FEATURE_CLASSIFICATION_FLAGS AND cloudmask
>> The resulting "CLOUDY" variable will be nonzero where the 2-'cloud'
>> bit is set.
>> combine with other bits as needed.
>
> Here is an article that might give you some help with
> how to use ISHFT:
>
> http://www.dfanning.com/code_tips/convert24to8.html
>
> This is essentially what you want to do with your
> value.
>
> Cheers,
> David
>
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
> Coyote's Guide to IDL Programming:http://www.dfanning.com/
> Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Hmmm,

Still not sure what's going on.

If I pick a value:

> myval= FEATURE_CLASSIFICATION_FLAGS(10,20)
> print,binary(fix(myval))
0 1 0 0 0 0 0 0 0 0 0 1 1 1 0 1

Then is it safe to say that bits 1 to 3 represent 1*2^0 + 0*2^1 +
1*2^2 = 3. So then I know it's not cloud since cloud is '2'? Bits
1-3 can take on any values '0' to '7', '2' being cloud. Documentation
also says that bits 4 through 5 take on values '0' to '3'. So in the
above, I would do 1*2^0 + 1*2^1 = 3? Bits 6 to 7 can also take on
values from '0' to '3', ... bits 14 to 16 can take on values from '0'
to '5' so in the above, bits 14 to 16 give a value of 2?

For bits 14 to 16, if I do

print,ishft((fix(myval)),-13) I also get a value of 2 so I think this is what your saying to do here?

Thanks,

Howard
