
Subject: Re: Integer Array into Binary Array
Posted by [vikramivatury](#) on Thu, 25 Jun 2009 17:02:34 GMT
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On Jun 25, 12:59 pm, Vikram <vikramivat...@gmail.com> wrote:

> Hello,
>
> I was wondering if there was a way of converting an integer array into
> binary?
> For example, we have an integer array with the following:
>
> test = [1,2,3]
>
> If we convert this to a binary array, we should get:
>
> 0000000000000000100000000000000100000000000000100, etc.
>
> Is this possible in IDL?
>
> Thanks,
> Vikram

I have made use of Dr. Fanning's BINARY.PRO and I have written something:

```
img = read_tiff('Resol_Test2C.tiff')
```

```
target = lonarr(4,1280,1024)
```

```
bin = where(img gt 0.0)  
num = n_elements(bin)  
target[bin] = img[bin]
```

```
num = n_elements(target)
```

```
output = lonarr(4,5,5)
```

```
test = [343,494]
```

```
for x=0, n_elements(test)-1 do begin  
  output[x] = binary(test[x],/color)  
endfor
```

But if I do a print,output I can only get the binary for the 494, not both 343 and 494 in the same array. Any ideas?

Thanks,

Vikram

Subject: Re: Integer Array into Binary Array
Posted by [David Fanning](#) on Thu, 25 Jun 2009 17:16:01 GMT
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Vikram writes:

```
> I have made use of Dr. Fanning's BINARY.PRO and I have written
> something:
>
> img = read_tiff('Resol_Test2C.tiff')
>
> target = lonarr(4,1280,1024)
>
> bin = where(img gt 0.0)
> num = n_elements(bin)
> target[bin] = img[bin]
>
> num = n_elements(target)
>
> output = lonarr(4,5,5)
>
> test = [343,494]
>
> for x=0, n_elements(test)-1 do begin
>   output[x] = binary(test[x],/color)
> endfor
>
> -----
> But if I do a print,output I can only get the binary for the 494, not
> both 343 and 494 in the same array. Any ideas?
```

BINARY produces string output. Maybe you want this:

```
IDL> test = [343,494]
IDL> print, test, format='(b24)'
      101010111
      111101110
```

Cheers,

David

--

David Fanning, Ph.D.

Subject: Re: Integer Array into Binary Array

Posted by [vikramivatury](#) on Thu, 25 Jun 2009 17:32:45 GMT

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On Jun 25, 1:16 pm, David Fanning <n...@dfanning.com> wrote:

> Vikram writes:

>> I have made use of Dr. Fanning's BINARY.PRO and I have written
>> something:

>

>> img = read_tiff('Resol_Test2C.tiff')

>

>> target = lonarr(4,1280,1024)

>

>> bin = where(img gt 0.0)

>> num = n_elements(bin)

>> target[bin] = img[bin]

>

>> num = n_elements(target)

>

>> output = lonarr(4,5,5)

>

>> test = [343,494]

>

>> for x=0, n_elements(test)-1 do begin

>> output[x] = binary(test[x],/color)

>> endfor

>

>> -----

>> But if I do a print,output I can only get the binary for the 494, not

>> both 343 and 494 in the same array. Any ideas?

>

> BINARY produces string output. Maybe you want this:

>

> IDL> test = [343,494]

> IDL> print, test, format='(b24)'

> 101010111

> 111101110

>

> 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.")

Ok, that makes sense. Is there a way of saving this binary into an array? Or is the only way just printing it to the screen?

Thanks,
Vikram

Subject: Re: Integer Array into Binary Array
Posted by [Spon](#) on Thu, 25 Jun 2009 17:48:24 GMT
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On Jun 25, 6:32 pm, Vikram <vikramivat...@gmail.com> wrote:

```
> On Jun 25, 1:16 pm, David Fanning <n...@dfanning.com> wrote:
>
>
>
>> Vikram writes:
>>> I have made use of Dr. Fanning's BINARY.PRO and I have written
>>> something:
>
>>> img = read_tiff('Resol_Test2C.tiff')
>
>>> target = lonarr(4,1280,1024)
>
>>> bin = where(img gt 0.0)
>>> num = n_elements(bin)
>>> target[bin] = img[bin]
>
>>> num = n_elements(target)
>
>>> output = lonarr(4,5,5)
>
>>> test = [343,494]
>
>>> for x=0, n_elements(test)-1 do begin
>>>   output[x] = binary(test[x],/color)
>>> endfor
>
>>> -----
>>> But if I do a print,output I can only get the binary for the 494, not
>>> both 343 and 494 in the same array. Any ideas?
>
>> BINARY produces string output. Maybe you want this:
```

```
>
>> IDL> test = [343,494]
>> IDL> print, test, format='(b24)'
>>      101010111
>>      111101110
>
>> 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.")
>
> Ok, that makes sense. Is there a way of saving this binary into an
> array? Or is the only way just printing it to the screen?
>
> Thanks,
> Vikram
```

Hi Vikram,

just use the 'string' function.

```
a=indgen(12)
b=string(a,format='(b024)')
print,transpose(b)
```

Have a look at the helpfile on format codes. I know I have to read it again every time I want to figure out which format code I need *this* time! :-)

Cheers,
Chris

Subject: Re: Integer Array into Binary Array
Posted by [David Fanning](#) on Thu, 25 Jun 2009 17:50:11 GMT
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Vikram writes:

```
> Ok, that makes sense. Is there a way of saving this binary into an
> array? Or is the only way just printing it to the screen?
```

There is no "binary" data format in IDL. You can certainly

store it as a string. There are tips here for how you can convert your binary string back to a number:

http://www.dfanning.com/misc_tips/binary_hex.html

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.")

Subject: Re: Integer Array into Binary Array

Posted by [vikramivatury](#) on Thu, 25 Jun 2009 17:52:44 GMT

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On Jun 25, 1:50 pm, David Fanning <n...@dfanning.com> wrote:

> Vikram writes:

>> Ok, that makes sense. Is there a way of saving this binary into an

>> array? Or is the only way just printing it to the screen?

>

> There is no "binary" data format in IDL. You can certainly

> store it as a string. There are tips here for how you can

> convert your binary string back to a number:

>

> http://www.dfanning.com/misc_tips/binary_hex.html

>

> 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.")

Thanks for your help Chris and Dr. Fanning!

Best,

Vikram
