
Subject: Re: a strange loop problem

Posted by [David Fanning](#) on Tue, 24 Jun 2008 03:10:17 GMT

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bulrushmower@gmail.com writes:

```
> What is wrong with the loop for the following:
> i=0
> Print, 'SDS_NAME'+STRTRIM(string(i+1),2), prints SDS_NAME01
```

I don't think so:

```
IDL> I=0
IDL> Print, 'SDS_NAME'+STRTRIM(string(I+1),2)
SDS_NAME1
```

I think you want this:

```
IDL> I=0
IDL> Print, 'SDS_NAME' + String(I+1, FORMAT='(I2.2)')
SDS_NAME01
```

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: a strange loop problem

Posted by [bulrushmower](#) on Tue, 24 Jun 2008 04:26:25 GMT

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On Jun 23, 10:10 pm, David Fanning <n...@dfanning.com> wrote:

```
> bulrushmo...@gmail.com writes:
>> What is wrong with the loop for the following:
>> i=0
>> Print, 'SDS_NAME'+STRTRIM(string(i+1),2), prints SDS_NAME01
>
> I don't think so:
>
> IDL> I=0
> IDL> Print, 'SDS_NAME'+STRTRIM(string(I+1),2)
> SDS_NAME1
>
```

```

> I think you want this:
>
> IDL> I=0
> IDL> Print, 'SDS_NAME' + String(I+1, FORMAT='(I2.2)')
> SDS_NAME01
>
> 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 David,
But problem is still there.

```

ENVI> help, band
BAND      LONG    =      -1

```

```

It should be: BAND      LONG    =      0
But IDL> Band = hdf_sd_nametoindex(file, SDS_NAME01) prints:
BAND      LONG    =      0

```

Any idea about that? Basically, I am reading an HDF file.

Thanks

Subject: Re: a strange loop problem
 Posted by [Anthony\[1\]](#) on Tue, 24 Jun 2008 07:33:51 GMT
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On Jun 24, 3:53 am, bulrushmo...@gmail.com wrote:

```

> What is wrong with the loop for the following:
> i=0
> Print, 'SDS_NAME'+STRTRIM(string(i+1),2), prints SDS_NAME01
> But, Band = hdf_sd_nametoindex(file, 'SDS_NAME'+STRTRIM(string(i+1),
> 2)) is not the same with
> Band = hdf_sd_nametoindex(file, SDS_NAME01 )
> =====
> SDS_NAME01 = "SREFL_CH1"
> SDS_NAME02 = "SREFL_CH2"
> SDS_NAME03 = "BT_CH3"
> SDS_NAME04 = "BT_CH4"
> SDS_NAME05 = "BT_CH5"
> SDS_NAME06 = "SREFL_CH3"
> SDS_NAME07 = "SZEN"

```

```
> SDS_NAME08 = "VZEN"
> SDS_NAME09 = "RELAZ"
> SDS_NAME10 = "QA"
>
> file = hdf_sd_start(fPath_data
> +"AVH09C1.A1998180.N14.002.2007273131632.hdf")
>
> for i=0, 9 do begin
>   Band = hdf_sd_nametoindex(file, 'SDS_NAME'+STRTRIM(string(i+1),2))
>   data = hdf_sd_select(file, Band)
>   hdf_sd_getdata, data, getdata
>   hdf_sd_endaccess, data
>
> endfor
```

Band = ...(file, 'SDS_NAME01')

is not the same as

Band = ...(file, SDS_NAME01)

Maybe that's the problem?

You could use execute(), e.g.:

```
Void = execute('Band = ...(file,' + string(...) + ')')
```

Or why not put the SDS_NAMES into an array?

```
SDS_NAMES = ["SREFL_CH1", "SREFL_CH2", ...]
```

```
...
```

```
for i = 0, 9 do begin
```

```
  Band = hdf_sd_nametoindex(file, SDS_NAMES[i])
```

```
  ...
```

```
endfor
```

Hope that helps!

Cheers,
Anthony

Subject: Re: a strange loop problem

Posted by [bulrushmower](#) on Tue, 24 Jun 2008 13:36:34 GMT

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On Jun 24, 2:33 am, Anthony <[anthonymsmit...@gmail.com](#)> wrote:

> On Jun 24, 3:53 am, bulrushmo...@gmail.com wrote:

>

>

>

>

```

>
>> What is wrong with the loop for the following:
>> i=0
>> Print, 'SDS_NAME'+STRTRIM(string(i+1),2), prints SDS_NAME01
>> But, Band = hdf_sd_nametoindex(file, 'SDS_NAME'+STRTRIM(string(i+1),
>> 2)) is not the same with
>>     Band = hdf_sd_nametoindex(file, SDS_NAME01 )
>> =====
>> SDS_NAME01 = "SREFL_CH1"
>> SDS_NAME02 = "SREFL_CH2"
>> SDS_NAME03 = "BT_CH3"
>> SDS_NAME04 = "BT_CH4"
>> SDS_NAME05 = "BT_CH5"
>> SDS_NAME06 = "SREFL_CH3"
>> SDS_NAME07 = "SZEN"
>> SDS_NAME08 = "VZEN"
>> SDS_NAME09 = "RELAZ"
>> SDS_NAME10 = "QA"
>
>> file = hdf_sd_start(fPath_data
>> +"AVH09C1.A1998180.N14.002.2007273131632.hdf")
>
>> for i=0, 9 do begin
>>     Band = hdf_sd_nametoindex(file, 'SDS_NAME'+STRTRIM(string(i+1),2))
>>     data = hdf_sd_select(file, Band)
>>     hdf_sd_getdata, data, getdata
>>     hdf_sd_endaccess, data
>
>> endfor
>
> Band = ...(file, 'SDS_NAME01')
> is not the same as
> Band = ...(file, SDS_NAME01)
> Maybe that's the problem?
>
> You could use execute(), e.g.:
> Void = execute('Band = ...(file,' + string(...) + ')')
>
> Or why not put the SDS_NAMES into an array?
>
> SDS_NAMES = ["SREFL_CH1", "SREFL_CH2", ...]
> ...
> for i = 0, 9 do begin
>     Band = hdf_sd_nametoindex(file, SDS_NAMES[i])
>     ...
> endfor
>
> Hope that helps!

```

>
> Cheers,
> Anthony- Hide quoted text -
>
> - Show quoted text -

Thanks for all the help. I tried all, but does not work. But I solved the problem using other method.

--get variable names by Gumley's HDF file reader
--then loop the variable namses as a string

It works.
