
Subject: Re: more bugs in envi !!!

Posted by [marc schellens\[1\]](#) on Wed, 16 Jul 2003 00:17:16 GMT

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Could you post the COMPLETE stuff?

I mean the calling procedure or function?

Try to delete everything which is irrelevant.

I hardly assume, that the mistake lies somewhere there.

Maybe another subroutine changes some of its arguments?

Regards,

marc

Gaurav wrote:

> Hi!

> Okay...i shall give u the outputs also. Here are the functions:

>

> 1.;Stored in file trash.pro

> function ex,b1

> print,' This is the function ex,b1'

> print,size(b1)

> help,b1

> end

> 2.;Stored in file trash2.pro

> function ex2,b1,b2

> print,'This is the function ex2,b1,b2'

> print,size(b1)

> help,b1

> end

> The outputs of these functions are :

>

> ENVI>

> % Compiled module: TRASH.

>

> ENVI>

> % Compiled module: TRASH2.

>

> ENVI>

> This is the function ex,b1

> 2 5 5 4

> 25

> B1 FLOAT = Array[5, 5]

> This is the function ex,b1

> 2 5 5 4

> 25

> B1 FLOAT = Array[5, 5]

> This is the function ex,b1

> 2 5 5 2

> 25

```

> B1          INT      = Array[5, 5]
> This is the function ex,b1
>      2      568      653      2
> 370904
> B1          INT      = Array[568, 653]
>
> ENVI>
> This is the function ex2,b1,b2
>      2      5      5      4
> 25
> B1          FLOAT     = Array[5, 5]
> This is the function ex2,b1,b2
>      2      5      5      4
> 25
> B1          FLOAT     = Array[5, 5]
> This is the function ex2,b1,b2
>      2      5      5      2
> 25
> B1          INT      = Array[5, 5]
> This is the function ex2,b1,b2
>      2      568      326      2
> 185168
> B1          INT      = Array[568, 326]
> This is the function ex2,b1,b2
>      2      568      327      2
> 185736
> B1          INT      = Array[568, 327]
>
> ENVI>
>
> Hope this helps you in finding out the answer to my question.
>
> Gaurav Jain
>
>
>
> Marc Schellens <m_schellens@hotmail.com> wrote in message
news:<3F12DAB7.607@hotmail.com>...
>
>> Would be helpful if you post WHAT they output also.
>> And then of course the context from which you call them...
>> (Two functions with the same name cannot live in one (IDL-) program)
>>
>> Gaurav wrote:
>>
>>> Hi all!
>>> Thanx for the help...well u both were right...i was under the wrong
>>> impression that i had defined it as a long integer...but i hadn't. But

```

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>>> i still cant find out why these 2 functions are producing different
>>> outputs :
>>> Please go through the 2 functions:
>>>
>>>
>>>> >1.function example,b1
>>>> > help,b1
>>>> > end
>>>> >2.function example,b1,b2
>>>> > help,b1
>>>> > end
>>>> >
>>>> > Now could anyone tell me why these 2 codes are producing different
>>>> >final answers??? I just cant find any reason for it.
>>>>
>>>
>>> Gaurav Jain
>>> ENST-Bretagne
>>>
>>>
>>> Marc Schellens <m_schellens@hotmail.com> wrote in message
news:<3F115ED4.6040200@hotmail.com>...
>>>
>>>
>>>> >Hi folks!
>>>> > Sorry to trouble u again....but envi seems to be just going above my
>>>> >head...there is another problem that i am facing:
>>>> >Please go through the 2 functions:
>>>> >
>>>> >1.function example,b1
>>>> > help,b1
>>>> > end
>>>> >2.function example,b1,b2
>>>> > help,b1
>>>> > end
>>>> >
>>>> > Now could anyone tell me why these 2 codes are producing different
>>>> >final answers??? I just cant find any reason for it.
>>>> >
>>>> >One more problem :
>>>> >
>>>> >'b1' is a positive array and 'avgb1' is a positive number but when i
>>>> >use the formula : result=b1*100/avgb1
>>>> >     print, result
>>>> >, the answer that i get is a negative array.
>>>> >
>>>> > Whereas if i use the formula : result=b1/avgb1
>>>> >     print, result * 100

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>>>> >, then i get a positive array
>>>> >
>>>>
>>>> Even without knowing ENVI, the second problem isn't a bug in ENVI.
>>>>
>>>> A integer occupies (in IDL) 16-bit, and therefore covers a range from
>>>> -32768 to
>>>> 32767
>>>>
>>>> anything larger (or smaller) cannot be represented and therefore you
>>>> observe an 'overflow', resulting in a negative number.
>>>> IDL evaluates your expression from left to right, the
>>>> overflow occurs after the multiplication with 100.
>>>> In the second case the division is done first and thus the value seems
>>>> to be small enough not to overflow in the later multiplication.
>>>>
>>>> The solution is to convert your b1 array to LONG.
>>>> But did you notice that you do an integer division?
>>>> 1/2 equals 0.
>>>> Maybe you want to use FLOAT or DOUBLE.
>>>>
>>>> hdh,
>>>> marc
>>>>
```
