Subject: Re: Pointer Help - Referencing/Dereferencing in Functions & Procedures
Posted by Patrick Serengulian on Thu, 13 Mar 2003 13:45:02 GMT
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Thank you Mr. Smith and Chris for responding so promptly. I went home and gave it some thought. I don't think it's worth the hassle to figure out pointer in IDL. I had no problems using pointers in C/C++, but with IDL it's over my head. I don't have the time to properly learn IDL syntax on pointers. Rather than using the common block (aka global variables), I'm just going to create a structure to house all the variables I want to pass in and out of procedures. I think this will be the most efficient method to solve my issue of passing in and returning multiple variables. Thank you again for your help.

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"JD Smith" <jdsmith@as.arizona.edu> wrote in message
news:pan.2003.03.12.23.57.32.253437.6986@as.arizona.edu...
> On Wed, 12 Mar 2003 13:50:55 -0700, Chris wrote:
>
>> You need to pass an argument into your procedure; as far as it knows
>> "number_ptr" hasn't been declared.
>>
>> Change the first line of number_proc to:
>>
>> pro number_proc, number_ptr
>>
>> and the call in $MAIN$ to
>>
>> number_proc,number_ptr
>>
>>
>>
>> and it should work.
>>
>>
>> Chris
>
>
> Which is to say that, even though the heap of data to which a pointer
> points is available globally, the pointer itself is not. In fact, when
> you lose the pointer, but the heap data remains, this is a memory leak:
>

> IDL> a=ptr_new(fltarr(1000))
> IDL> a=1 ; uh oh, where's the pointer?
> IDL> help,/heap
> Heap Variables:
> # Pointer: 1
> # Object : 0
>
> <PtrHeapVar1> FLOAT = Array[1000]
>
> Here you see data on the global "pointer heap", but since you
> overwrote the pointer referring to it with "1", it's lost. It's still
> on the heap, but you just can't get to it (unless you know some arcane
> tricks). You can clean it up with:
>
> IDL> heap_gc,/verbose
> <PtrHeapVar1> FLOAT = Array[1000]
>
> That got rid of it. So, in order to use the data a pointer points to,
> you need to pass the pointer in as an argument, or perhaps save it in
> a common block so you can get to it from anywhere.
>
> JD
