Subject: Delete element from the structure inside another structure
Posted by Andrii on Sun, 06 Jul 2014 23:37:35 GMT
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Hello everybody!

I'd like to ask you about one thing which is generally already discussed in other groups.

But my question is a bit more specific.

I have a structure inside another structure like this one:

a = { f1: 0, f2: { x: FltArr(10,10,10), y: 0}}

My question is, how can I delete just an array x, or to replace an array x with the array y = FltArr(5,5,5)?

Thank you!

Subject: Re: Delete element from the structure inside another structure
Posted by greg.addr on Mon, 07 Jul 2014 08:50:53 GMT
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Hi Andrii,

I think you can't do that directly. You have two choices: either create a new structure in the shape you want, and explicitly copy over the elements you want to retain (struct_assign), or -- probably the better solution -- use a pointer in the first place, so that:

a = { f1: 0, f2: { x: ptr_new(FltArr(10,10,10)), y: 0}}

then you could set a.f2.x=ptr_new(FltArr(5,5,5)) and access with

print,*(a.f2.x)

If you want to be able to change all the values, put the pointers at the lowest level, and recreate the structures each time:

a=ptrarr(2)
a[0]=ptr_new(0)
a[1]=ptr_new({ x: ptr_new(FltArr(10,10,10)), y: 0})

or

a[1]=ptr_new({ x: ptr_new(FltArr(5,5,5)), y: 0})

cheers,

Greg

Subject: Re: Delete element from the structure inside another structure
Posted by Andrii on Mon, 07 Jul 2014 08:57:08 GMT
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Hi Greg,

Thanks a lot. I will try!

Cheers,
Andrii

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>
>
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>
>
>
> cheers,
>
> Greg

Subject: Re: Delete element from the structure inside another structure
Posted by greg.addr on Mon, 07 Jul 2014 09:02:25 GMT
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actually, I should have written:

a=ptrarr(2)
a[0]=ptr_new(0)
a[1]=ptr_new({ x: FltArr(10,10,10), y: 0})

or

a[1]=ptr_new({ x: FltArr(5,5,5), y: 0})

greg

Subject: Re: Delete element from the structure inside another structure
Posted by Andrii on Mon, 07 Jul 2014 09:27:01 GMT
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Thanks!

Could you please also write me, how to completely delete a[1] ?

If I want to print x, should I do it in the next way: print,*a[1].x ?

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>
>
>
> greg

Subject: Re: Delete element from the structure inside another structure
Posted by Andrii on Mon, 07 Jul 2014 09:38:55 GMT
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Thanks!

Could you please also write me, how to completely delete a[1].x ?

As I understand, in order to delete a[1] I have to do it in the next way:
ptr_free, a[1].

If I want to print x, should I do it in the next way: print,*(a[1].x) ?

Subject: Re: Delete element from the structure inside another structure
Posted by Fabzi on Mon, 07 Jul 2014 09:49:15 GMT
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If you have IDL8+ you can use dictionnaries instead of structures:

```
IDL> a = dictionary('f1', 0, 'f2', dictionary('x', FltArr(3), 'y', 0))
IDL> print, a.f2.x
      0.00000      0.00000      0.00000
IDL> a.f2.x = 2
IDL> print, a.f2.x
       2
IDL> ok = (a.f2)->remove('x')
```

IDL> print, a.f2.x
% Key does not exist: "X"
% Execution halted at: $MAIN$

Cheers,

Fabien

Subject: Re: Delete element from the structure inside another structure
Posted by greg.addr on Mon, 07 Jul 2014 09:51:58 GMT
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> Could you please also write me, how to completely delete a[1] ?

I would probably do this:

a[1]=ptr_new() ;this sets a null pointer

and then test for it in the code:

if ptr_valid(a[i]) then...

> If I want to print x, should I do it in the next way: print,*a[1].x ?

print,(*a[1]).x

cheers,
greg
