
Subject: Re: dynamic memory allocation

Posted by [Mark Hadfield](#) on Mon, 06 Dec 2004 02:16:47 GMT

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Francois wrote:

> Hello,
>
> How to dynamically allow memory for an array ?
> For example, to declare a 2D array of 30 columns by 40 lines, you type
> this code:
> a = intarr(30,40)
>
> But if you don't know, before compilation, the number of dimensions of
> the array, how do we do this ?
>
> Thank you,
>
> François.

In IDL, variables are created at run time and do not need to be "declared" beforehand. Consider the following code

```
pro test
  a = dist(30,40)
  surface, a
  a = 'My string'
  print, a
end
```

The first line of the procedure creates a floating point array dimensioned (30,40) and associates the variable name "a" with it. (The dimensions in this example are known at compile time, but they do not need to be.) The second line plots it as a surface plot. The third line creates a string and associates the name "a" with it. (The array created in line 1 is no longer accessible to IDL and the memory associated with it may--or may not--be returned to the operating system.) The fourth line prints the string to the console.

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