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Subject: Re: Delvar?

Posted by [David Fanning](#) on Fri, 28 Jun 2002 19:01:18 GMT

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William (wmc@bas.ac.uk) writes:

```
> OK, I've read it, but I have only a vague idea of why:
>
> tempvar = Size(Temporary(varname))
>
> works to delete varname...
```

Alright. First of all, this code is inside a procedure.

That's important. UNDEFINE looks like this:

```
.*****
,
PRO UNDEFINE, varname
IF (N_Elements(varname) NE 0) THEN tempvar = Size(Temporary(varname))
END
.*****
,
```

The variable varname is passed in by reference. So anything we do to it inside the procedure will affect it outside the procedure as well. In your case, you are passing the variable image into this procedure:

    Undefine, image

What we do is undefine varname by using it as an argument to the TEMPORARY function, returning something of similar size and type for the SIZE function to digest. But when SIZE is finished, varname is undefined.

But, of course, we have created the variable tempvar, which is a bit bigger than our original image = 0 problem we started with. But, since we are inside a procedure, any memory allocated to tempvar is release once the procedure exits. The result is that we have completely undefined the variable varname (and, because it was passed by reference, the variable image), and we no have all the memory originally associated with image available to re-use in our program.

Plus, if you use the variable image subsequently in an expression, you will get the message that "image is undefined" rather than something else that would make absolutely no sense in the context of your program. It just looks a whole lot cleaner and you can see at a glance in your code what you are doing. :-)

Cheers,

David

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