Subject: Re: storing in array
Posted by Spon on Mon, 12 May 2008 14:09:15 GMT
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On May 11, 12:48 am, kishore1...@gmail.com wrote:
> vfm_feature_flags,36282
Also, be careful: the above number is converted to a longword integer by IDL. This might cause headaches later on if you're expecting a 16-bit input. You could use:
vfm_feature_flags,36282u
to ensure the number is defined as a 16-bit unsigned integer.
I would protect my code like this:

```
function vfm_feature_flags, input

 ; Check input
if input gt 65535L or input lt -32767L then $
  message, 'Input not a 16-bit flag.'

 ; Convert input to unsigned integer
val = uint(input)
```

You've already written a loop to convert your flag to sub-flags, so this may be superfluous, but I've had a dig around the format codes and come up with this:

```
 ; Convert to left-zero-padded 16-char string
bval = string(val, format = '(B016)')

 ; And then you can extract substrings to get
 ; the sub-flag values using ReadS:
ftflag = strmid(bval, 0, 3) ; Position 0, length 3
feature_type = 0u
reads, ftflag, format = '(B)', feature_type

ftqflag = strmid(bval, 3, 2) ; Position 3, length 2
feature_type_qa = 0u
reads, ftqflag, format = '(B)', feature_type_qa
 ; and so on.
```

I have to say, the fact that ReadS is a procedure and not a function, plus the fact that you can't pass type codes to it for your output does seem a bit counter-intuitive to me. Your FOR loop will in theory be slower,but probably not noticably; and at least it's pretty easy to

follow compared to messing about with format codes. But it can be done without the loop.

Regards,
Chris