Subject: Re: Looking for more ideas on code ...
Posted by thompson on Wed, 02 Oct 2002 14:24:10 GMT
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jeyadev@wrc.xerox.bounceback.com (Surendar Jeyadev) writes:

> In article <onr8fbugea.fsf@cow.physics.wisc.edu>,
> Craig Markwardt <craigmnet@cow.physics.wisc.edu> wrote:
>>
>> jeyadev@wrc.xerox.bounceback.com (Surendar Jeyadev) writes:
>>
>>>   ....
>>>
>>> --
>>>
>>> function sinc, y
>>>
>>>
>>> if(n_elements(y) eq 1) then begin   ; y is a scalar
>>>   if(y eq 0.0) then profile = 1.0 else begin
>>>   profile = sin(y)/y
>>>   endelse
>>>   endif else begin   ; y is a vector
>>>   zeros = where(y eq 0.0, ind)
>>>   if(ind gt 0) then y(zeros) = 1.0e-10   ; set zeroes to a small quantity
>>>   profile = sin(y)/y
>>> endelse
>>>
>>> profile = profile*profile/a0

> My mistake there. I am actually after sinc^2 ..... but it
> has not caused any harm!
>
>>> return, profile
>>>
>>> end
>>>
>>
>> Second of all, you can simplify your logic a little, by pre-filling
>> the array with the "special case:"
>>
>>   profile = y*0 + 1.   ;; Tricky way to get array filled with zeroes
>>   wh = where(y NE 0, ct)
>>   profile(wh) = sin(y(wh))/y(wh)

> Nice one that, when the only exceptional value is the same for
> all "problem" points.

The only suggestion I would make would be to change the last line to

if ct gt 0 then profile(wh) = sin(y(wh))/y(wh)

I've been bitten by that one on countless occasions.

William Thompson
