Subject: Efficient IDL Programming - RESULTS
Posted by dean on Wed, 08 Dec 1993 19:23:25 GMT
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I just wanted to share my results with everbody that monitors comp.lang.idl-pvwave. My first method for reading my (512,64) file and expanding to (512,512) was using the FOR DO BEGIN loops which took about 30 seconds on a VAXstation 4000 running VMS. I tested three suggestion that were posted or sent directly to me.

Dr. Marty Ryba suggestion took about 9 secs:

```
imxgrf = rebin(rotate(imxgrf, 4), 8, isize)
mask = 2b^rebin(bindgen(8), 8, isize)
graphic = (imxgrf AND mask) NE 0
graphic = reform(graphic, ysize, xsize, /overwrite)
```

Chris Chase suggestion took about 12 seconds:

```
mask = 2B^indgen(8)
B = bytarr(512,512)
A = transpose(A) ; Put the 64 bytes along the rows.
B(*) = (byte(mask#A(*))/128B)(*)
```

Eric Deutsch suggestion took about 20 seconds:

```
input_img=byte(indgen(xsize/8,ysize))   ; sample input image
tmp=lindgen(1.0*ysize*xsize)            ; 1.0 to avoid int wrap
tmp2=tmp-(tmp/8)*8                      ; create mask input
tmp3=reform(tmp2,xsize,ysize)           ; reform to correct dim's
mask=2L^tmp3                            ; create bitmask
work=congrid(inimg,xsize,ysize)         ; replicate each byte 8 times
outimg=(work and mask) ne 0             ; perform the mask
outimg=byte(outimg)*244b                ; enhance value
```

Thanks again for your suggestions. I approached this problem as FORTRAN programmer thinking FOR loop, FOR loop, ..., but came away thinking like an IDL programmer.

Kelly Dean