
Subject: a newbie question on code efficiency

Posted by [gogosgogos](#) on Sat, 18 Aug 2001 02:54:19 GMT

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Dear group members,

i have a little challenge for you which i stumbled into..
i tried to write a program which takes a 3d array,
sets a cutoff at a certain level and then creates a mask
of all values above that level. the mask has to be 1 and 0.
i came up with this code, but could never get rid of the loop.

any suggestions on how to get rid of the loop?

i would prefer array operators for speed :)

```
;-----
```

```
PRO MAKE_MASK
```

```
a = dialog_pickfile()
```

```
b = READ_BINARY(a, DATA_TYPE=1, DATA_DIMS=[160,256,256])
```

```
b_dims = size(b)
```

```
x_dim = b_dims[1]
```

```
y_dim = b_dims[2]
```

```
z_dim = b_dims[3]
```

```
cutoff = 180
```

```
e = b
```

```
for i = 0, (x_dim-1) do begin
```

```
  for j = 0, (y_dim-1) do begin
```

```
    for k = 0, (z_dim-1) do begin
```

```
      if e[i,j,k] lt cutoff then e[i,j,k]=0
```

```
      if e[i,j,k] ge cutoff then e[i,j,k]=1
```

```
    endfor
```

```
  endfor
```

```
endfor
```

```
; and so on to use the mask further in the program
```

```
END
```
