
Subject: Re: a newbie question on code efficiency
Posted by [Dominic R. Scales](#) on Sat, 18 Aug 2001 12:44:32 GMT
[View Forum Message](#) <> [Reply to Message](#)

David Fanning wrote:

```
> Uh, I think you must have tried this:
>
> e = b > cutoff
>
> I can assure you that this:
>
> e = b GT cutoff
>
> gives you a mask of 0s and 1s. :-)
>
> Cheers,
>
> David
>
Hi David,
```

this seems to be not true as `b = a > cutoff` sets the values smaller than cutoff to cutoff and keeps the others as they are.

```
IDL> a=bindgen(10,10)
IDL> b = a > 50
IDL> print,a
 0  1  2  3  4  5  6  7  8  9
10 11 12 13 14 15 16 17 18 19
20 21 22 23 24 25 26 27 28 29
30 31 32 33 34 35 36 37 38 39
40 41 42 43 44 45 46 47 48 49
50 51 52 53 54 55 56 57 58 59
60 61 62 63 64 65 66 67 68 69
70 71 72 73 74 75 76 77 78 79
80 81 82 83 84 85 86 87 88 89
90 91 92 93 94 95 96 97 98 99
IDL> b= a > 50
IDL> print,b
 50  50  50  50  50  50  50  50  50  50
 50  50  50  50  50  50  50  50  50  50
 50  50  50  50  50  50  50  50  50  50
 50  50  50  50  50  50  50  50  50  50
 50  51  52  53  54  55  56  57  58  59
 60  61  62  63  64  65  66  67  68  69
 70  71  72  73  74  75  76  77  78  79
```

```
80 81 82 83 84 85 86 87 88 89
90 91 92 93 94 95 96 97 98 99
```

IDL>

the following does the trick:

```
IDL> b[where(a le 50)] = 0
```

```
IDL> b[where(a gt 50)] = 1
```

```
IDL> print,b
```

```
0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0
0 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1
```

IDL>

--

Dipl. Phys. Dominic R. Scales | Aero-Sensing Radarsysteme GmbH

Tel: +49 (0)8153-90 88 90 | c/o DLR Oberpfaffenhofen

Fax: +49 (0)8153-908 700 | 82234 Wessling, Germany

WWW: aerosensing.de | email: Dominic.Scales@aerosensing.de