Subject: Re: how to compile a matrix whose some elements are matrixes
Posted by Jean H. on Fri, 14 Jul 2006 16:34:50 GMT
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Hello,

well, your array will hold two different things: an int and an array of int.
If you want to keep your zeroes as individual values, maybe you should
consider using a pointer. You create a 7*7 pointer array, and you assign
either the value 0 or the matrix G or I to each cell.
mat = ptrarr(7,7)
(*mat)[0,0] = G
(*mat)[0,3] = 0

If you don't mind to replicate your zeroes (in a 7,7 array), just create
a 49*49 array and fill it with G,I and the 7*7 zeroes array!
mat[0,0] = G
mat[7,0] = I

Jean

haojuanchina@gmail.com wrote:
> Hello,everyone
> I want obtain a matric whose some elements are matrixes, how to compile
>
> the program?
> example: I want to abtain the following matrix
>
```
>          G  I  0  0  0  0  0
>          I  G  I  0  0  0  0
>          0  I  G  I  0  0  0
>          0  0  I  G  I  0  0
>          0  0  0  I  G  I  0
>          0  0  0  0  I  G  I
>          0  0  0  0  0  I  G
```
> in which I is an identity matrix,
>
```
>          1  0  0  0  0  0  0
>          0  1  0  0  0  0  0
>          0  0  1  0  0  0  0
>          0  0  0  1  0  0  0
>          0  0  0  0  1  0  0
>          0  0  0  0  0  1  0
>          0  0  0  0  0  0  1
```
> and G is a similar diagonal matrix:
>
```
>          1  2  0  0  0  0  0
>          2  1  2  0  0  0  0
>          0  2  1  2  0  0  0
>          0  0  2  1  2  0  0
>          0  0  0  2  1  2  0
```

> 0 0 0 0 2 1 2
> 0 0 0 0 0 2 1
> I can compile the program of the matrix G and I:
> PRO Matrix
>
> diag =findgen(7)
> sub=findgen(6)
> super=findgen(6)
>
>
> diag[0:6]=1
> sub[0:5]=2
> super[0:5]=2
>
>
> G = DIAG_MATRIX(diag) + $
> DIAG_MATRIX(super, 1) + DIAG_MATRIX(sub, -1)
> G[0,1:5]=2
> G[1:5,0]=2
> print,G
>
> I= identity(7)
> print,I
>
> END
>
>
> but how to get the first matrix in which include the matrix G and I?
> The difficulty is that I can not compile the diagonal elements (the
> smaller matrixes) of the larger matrix. How should I do?
> Thanks!
> Juan Hao
>
