
Subject: a matrix whose some elements are matrixes

Posted by haojuanchina@gmail.co on Mon, 10 Jul 2006 08:19:20 GMT

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I want obtain a matric whose some elements are matrixes, how to compile the program?

example: Iwant to abtain the following matrix

```
G I I I I I 0  
I G I 0 0 0 0  
I I G I 0 0 0  
I 0 I G I 0 0  
I 0 0 I G I 0  
I 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 -0.25 -0.25 -0.25 -0.25 -0.25 0  
-0.25 1 0 0 0 0 0  
-0.25 0 1 0 0 0 0  
-0.25 0 0 1 0 0 0  
-0.25 0 0 0 1 0 0  
-0.25 0 0 0 0 1 0  
0 0 0 0 0 0 1
```

I can compile the program of the matrix G:

PRO Matrix

```
diag =findgen(7)  
sub=findgen(6)  
super=findgen(6)  
  
diag[0:6]=1  
sub[0:5]=-0.25  
super[0:5]=-0.25  
  
G = DIAG_MATRIX(diag) + $  
DIAG_MATRIX(super, 1) + DIAG_MATRIX(sub, -1)  
G[0,1:5]=-0.25  
G[1:5,0]=-0.25  
print,G  
  
I= DIAG_MATRIX(diag[0:6]);*(-0.25)
```

print,I

END

but how to get the first matrix in which include the matrix G and I ?
Please give me a help!thanks.
