
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 matrix whose some elements are matrixes, how to compile the program?

example: I want to obtain 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  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.
